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## ABSTRACT

The major purpose of this study is to investigate possible differences among 2-year colleges that differ in educational philosophies. Branch campuses are found to prepare students for transfer to 4-year colleges; junior colleges and technical institutes prepare students in both transfer and terminal programs; and vocational-technical centers strongly emphasize immediate job preparation. Ninety schools were surveyed for program emphasis, educational costs, student body and faculty characteristics, articulation with other schools, and the role of the institution in an educational system. A total of 7,673 students enrolled in 1969 were surveyed for demographic characteristics, previous and current educational experiences, and occupational goals. A total of 1,455 (1967) graduates were surveyed for personal characteristics, high school experience, other post-secondary schools attended, 2-year college experience, post-junior college education, employment and financial status, and goals and aspirations. Student and graduate groups were compared whenever a data base was present. Finally, 2,015 faculty were surveyed for demographic and occupational characteristics, and attitudes toward school services and policy. The results indicate differences in the above areas according to type of school. A detailed discussion of research methodology and results, and the questionnaires used in the study are included. (CA)

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Although large-scale survey research is becoming increasingly difficult each year due to various problems associated with mailing and response rates, it must be said that this study had more than its share of typical problems.

It is unfortunate that Dr. Godfrey who planned and initiated the study left the B.S.S.R. to accept a professorship at the University of North Illinois after only being able to partially complete the first phase report. The problems associated with her departure were further complicated when her two assistants left at the same time to go to graduate school. However, she extends her thanks and gratitude to David Green and Joshua Wiener who helped her to get the study underway and to develop the discussions on non-respondents and free comments.

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Engin I. Holmstrom, Ph. D.  
Study Director

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## HIGHLIGHTS OF FINDINGS

### School Setting

\*Educational philosophies of the publicly-supported two-year postsecondary institutions studied varied. Immediate job preparation was most strongly emphasized in the vocational-technical schools, while the branch campuses concentrated most heavily on preparing students for transfer to four-year colleges. Junior colleges and technical institutes tended to serve a dual purpose, offering both transfer and terminal programs.

\*Two-thirds of the students in junior colleges were in transfer programs, while the majority of the students in technical institutes were in occupational programs.

\*The "average two-year college" student paid almost no or very low tuition costs and a minimal number of fees. In general, the occupational programs were more expensive than academic programs.

### Students

\*The average two-year college student was white and young; the average age was 20 years. Full-time enrollees were generally recent high school graduates, whereas part-time students were six or seven years older.

\*There was evidence to indicate that the two-year colleges served as a vehicle for upward mobility, especially for the white lower-middle class, persons from rural and small town backgrounds, persons seeking

further education on a part-time basis, females younger than 19 and older than 30 years, and those who have been widowed, divorced or separated.

\*The majority of the two-year college students had considered enrolling in a four-year college and were planning to do so after graduation. The most often-quoted reason for not enrolling in a four-year college was a financial one.

\*The majority of the two-year college students held part-time jobs and were not utilizing financial aid resources that were or could be available to them in their respective schools.

\*Although students' attitudes toward the two-year colleges were generally positive, the nondegree students and part-time students were more critical than were the others, particularly regarding the academic counseling services.

### Graduates

\*In accordance with the expectations expressed by the students, it was found that almost three-fourths of the graduates of two-year colleges surveyed did continue their academic pursuits; and among those who continued either part-time or full-time, almost 80 per cent went on to a four-year college. The percentages of students going to four-year colleges differed, however, by type of school; the greatest number of enrollments were from the graduates of branch campuses, while the least were from graduates of vocational-technical centers.

### Faculty

\*The average two-year college faculty member was a white male in his late thirties, from a middle-class background, with a minimum

educational attainment of a master's degree and about eight years of teaching experience.

\*Teachers in vocational-technical centers and technical institutes tended to be older, to have been recruited from outside education, and, to have attained less education than the other teachers.

\*Teachers in occupationally-oriented schools, and particularly those in vocational-technical centers, worked longer hours, had longer contracts, and received lower salaries than the other teachers.

\*Most of the two-year college faculty members felt confident about preparing courses and teaching; but they were critical of both their own ability and that of the school to provide students with academic or occupational counseling.

\*Generally, most teachers would like to see their school become a truly comprehensive junior college, offering both academic and occupational programs, and serving both the four-year colleges and the local and state labor force. They were, on the average, reluctant to lower the admission restrictions and, with the exception of branch campus faculty, did not want the schools to become four-year colleges.

STUDY OF COMMUNITY COLLEGES AND VOCATIONAL-TECHNICAL  
CENTERS--PHASE I

(OEC-8-0-089014-3672(010))

I. INTRODUCTION

One of the most exciting developments in the field of higher education has been the rapid growth of postsecondary two-year institutions. In 1900, there were eight private "junior colleges" with an enrollment of only 100 students. In 1968, the American Association of Junior Colleges listed 993 institutions with an enrollment of almost two million students.<sup>1</sup> The majority of the institutions listed in the Junior College Directory were public; they varied widely, however, in their educational philosophies and in their organizational structures. For example, 56 of these institutions were technical institutes which had chosen to identify with the junior college movement. In addition to the junior colleges, there were approximately 300 other public institutions in 1968 offering some postsecondary occupational training.

Two-year postsecondary institutions may be called "junior colleges," "community colleges," "vocational centers," or "technical institutes," and may operate under a variety of organizational patterns. Some are organized and supported by a local school district, either in conjunction with other grades or separately as a junior college district serving secondary districts. Others receive most of their financial

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<sup>1</sup>The American Association of Junior Colleges, 1969 Junior College Directory (Washington, D. C.: The American Association of Junior Colleges, 1969), pp. 6-7.

support from the state, or function as two-year off-campus centers of four-year state colleges and universities.

Although major programs vary with individual schools, the institutions designated as vocational and technical institutes tend to emphasize occupational programs; those which have been accredited as junior colleges tend to offer a lower-division transfer program, as well as terminal occupational programs. Many of the occupational programs are similar, whether provided by a junior college or a vocational or technical institute. In addition, all kinds of schools offer a variety of part-time programs.

#### Purpose of Study

In 1968 the Bureau of Social Science Research, under contract with the Office of Program Planning and Evaluation of the U. S. Office of Education, began a major research effort to chart the development of each major type of publicly-supported nonbaccalaureate postsecondary institution. The study design differed from that of other "junior college" studies in that the universe of schools, and hence the sample, included technical institutes and vocational centers that did not offer transfer programs. Previous studies of two-year institutions have tended to treat them as a more or less homogeneous group of "junior colleges" and to compare the students with their "senior college" and "noncollege" age mates. Such studies demonstrate an explicit or implicit bias that traditional academic success is the normative standard, and conclude that the junior college transfer student appears to be less adequate than his "senior college" peers at the tasks of higher education. However, little is known about the occupational or academic success of the junior college

student who completes an occupational program, or about the prevailing school climate to which he is exposed.<sup>2</sup>

The major purpose of this study was to investigate the differences that might exist among two-year colleges which differed in their educational philosophies. Underlying our design was the proposition that the clientele attracted to (or recruited by) frankly occupationally-oriented institutions may possess distinctive personal characteristics and may respond differently than their more academically inclined age mates to the educational environment in which they find themselves.

#### The Study Population

The first task of the study was to define the study population so that a representative sample could be obtained of publicly-supported two-year colleges with educational philosophies varying along a continuum of academic vs. occupational orientation. A mail survey was then conducted, yielding information on (1) institutional structure of these schools and their (2) students, (3) graduates, and (4) faculty. In addition, two separate studies were subcontracted for (1) a cost-analysis of twenty two-year colleges, describing the costs of occupational or transfer programs, differences in funding, etc., and (2) an analysis of state systems within which the two-year colleges function. The seven state systems selected for the first phase of the study were the ones in which the largest number of two-year college students were enrolled. A second set of seven state systems, representing more diverse approaches to postsecondary,

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<sup>2</sup>A current study conducted jointly by the University of Wisconsin and the BSSR for U. S. O. E. provides data on job outcomes and further education for several thousand 1966 graduates of junior college vocational-terminal programs. See Laure M. Sharp and Thelma Myint, Graduates of Vocational-Terminal Programs in Junior Colleges (Washington, D.C.: Bureau of Social Science Research Report, 1970).

prebaccalaureate education will be studied in the second phase of the study. The data presented in this report summarize the findings from the first phase of the research related only to the mail survey of institutions, students, graduates, and faculty. The findings of the cost-analysis study and those of the seven state systems study have been reported under separate cover.<sup>3</sup>

### Methodology

#### Definition of Universe of Schools

Four types of public postsecondary schools, representing various institutional arrangements and educational philosophies, were included in the study population. These four types of schools were defined for sampling purposes as follows:

1. Branch campus.--A two-year institution, offering a program acceptable toward the baccalaureate, directly affiliated with a state university, and recognized as such by both the two-year college and the parent institution.
2. Junior college.--A two-year institution, offering a program acceptable toward the baccalaureate. It may also offer terminal occupational, liberal arts, and general courses.
3. Technical institute.--A two-year institution, requiring a high school diploma or its equivalent for entrance, which emphasizes occupational programs. It may offer liberal arts programs, but usually does not offer a complete transfer program.

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<sup>3</sup>See William C. Morsch, Study of Community Colleges and Vocational Training Centers: Cost Analysis (Washington, D. C.: Bureau of Social Science Research, 1970); and Seven State Systems of Community Colleges (Washington, D. C.: Bureau of Social Science Research, 1970).

4. Vocational-technical center.--A school which offers occupational programs almost exclusively. It differs from technical institutes both in the extent of the emphasis on occupational programs and in that it does not require a high school diploma for admission.

The terms Branch Campus, Junior College, Technical Institute, and Vocational-Technical center are consistently used throughout this report to refer to the institutions defined above.

#### Sample Design

A multi-stage sampling design was used. The procedure is discussed in detail in Appendix A. Briefly, a master list of the universe of about 1,200 postsecondary institutions was developed from a variety of sources.<sup>4</sup> The universe of institutions was then stratified by type of school, by enrollment size, and by geographic location<sup>5</sup> and dispersion, to the extent possible, thus creating 110 cells. Each cell of junior colleges contained approximately 20,000 students; each cell of technical institutions and vocational-technical centers contained approximately 10,000 students. Institutions were then selected with probability proportionate to size, yielding an unweighted sample of students, drawn on a sampling ratio of 1:133 students in a cell, or 150 from each cell of 20,000. Because adequate fall 1968 figures for faculty members were not available when the sample was drawn, the initial faculty sampling was set in relation to student population; i.e., 50 faculty members for a cell of 20,000

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<sup>4</sup>The major sources used were the AAJC Directory, O.E. directories for higher education, state educational plans and directories, and vocational and technical yearbooks.

<sup>5</sup>The Bureau of the Budget 1967 definition of standard metropolitan statistical areas and central cities was followed to locate schools in the central city of a SMSA, in other parts of a SMSA, or outside of a SMSA.



students. This procedure necessitated the application of compensatory weights to the faculty sample after more complete data on actual faculty counts were made available.

Similarly, in the case of graduates, the sample size for each selected school was based on an estimate of the size of the 1967 graduating class (the group chosen for study). More accurate information on the size of that graduating class was received from some schools, making it possible to derive adjustive weights to compensate for inequality of probability among graduates. If a school did not, or could not, provide accurate counts on the size of the 1967 graduating class, the adjustive weights were based on refined estimates, derived from the ratio of graduates to enrollees in similar schools.

#### Response Rates

Despite the use of first class mail, postal address-change services, and a number of follow-ups, the response rates fell short of our expectations. Usable returns were received from 61 per cent of the students, 57 per cent of the graduates, 58 per cent of the faculty, and 84 per cent of the administrators.<sup>6</sup>

#### Analysis of Nonrespondents

The nonresponse rate, which differed by type of school and by class of respondents, was considered significant enough to warrant a study of the nonrespondents, in order to determine possible sources of

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<sup>6</sup>An administrative liaison was selected in each school who provided rosters of students and faculty for sampling purposes. In addition, they were requested to fill out an institutional data form.

bias. A telephone survey of nonrespondents was therefore conducted in the winter of 1970. The results of this survey and the problems of non-response are described in detail in Appendix B. Briefly, the findings suggest that the populations of initial respondents and of nonrespondents who responded to the telephone follow-up are essentially quite comparable.

Comparison of student respondents and nonrespondents exhibited no significant differences across SMSA categories, type of school attended, degree of participation in the school program, demographic variables, or attitudes toward school. However, there were some indications that the student nonrespondents were both academically and financially poorer than the students who responded to the initial mailout. These findings, however, may be due to the fact that the more able and affluent students are more likely to continue with their education, and consequently, may not have been reached in the telephone survey in which only parental numbers were used. Thus, the differences found between the respondents and the nonrespondents may be a function of an underrepresentation of students of higher academic and financial status in the nonrespondent study.

Comparison of the two graduate groups likewise demonstrated little difference on location, demographic, and school participation variables. Again, there was a tendency for nonrespondents to be poorer students, to come from lower-income families, and to be less likely than the initial respondents to continue with their education.

The two faculty groups were the most similar. None of the variables chosen for comparison revealed any major differences between the faculty respondents and nonrespondents.

## II. SCHOOL SETTING

This section describes the results obtained from institutional data forms and other sources of information for 90 per cent of the schools in the sample.<sup>1</sup>

The sampling procedure used in the study is discussed in detail in Appendix A. As explained there, the institutions were selected with probability equal to size of enrollment as the first stage in a two-stage sampling procedure which was designed to produce a random, self-weighting sample of students, but not a random sample of institutions. Consequently, in the following discussions in which the unit of analysis is the school, the large schools tend to be underrepresented and the small schools overrepresented. However, the data are interesting in that they describe the school setting and lend some insights, however tentative, to the educational climate of the schools.

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<sup>1</sup>Eighty administrators completed the institutional form. Ten others provided catalogues or reports from which pertinent program data were extracted and described in this section. However, these findings must be treated with caution insofar as the schools were selected so that a random sampling of students, graduates, and faculty members would be possible. If we want to produce a school sample comparable to what would have emerged if each school had been given an equal chance to be selected--for example, to provide generalizations to a universe of schools--data pertaining to each school should be weighted inversely proportional to the probability of the school's selection. Thus, for example, the automatically included schools would be given weights of one; schools selected randomly from the strata would be given weights equivalent to the quotient of the total student body of the stratum from which the school was selected, divided by the size of the student body in the selected school. However, this weighting of the schools was not carried out insofar as the major purpose of this chapter was to provide descriptions of the academic milieu within which the students, graduates, and faculty members surveyed had worked. Generalizations to postsecondary two-year colleges cannot be drawn from the descriptive passages that follow.

Data on all of the schools are presented in the form of tables which depict the distribution of the schools by certain characteristics.<sup>2</sup> The discussion, however, goes beyond this and analyzes the enrollment characteristics of "the average school,"<sup>3</sup> as well as differences by type of school which are not presented in the tables.

### Program Emphasis

Examination of the institutional data revealed the expected continuum of educational philosophies ranging from immediate job preparation (emphasized most strongly in vocational-technical centers), through truly dual purpose institutions (junior colleges and technical institutes) to concentration on preparing the student for transfer to a four-year college (branch campuses).

Table II-1 presents the distribution of all schools in the sample by the proportion of their students enrolled in five major programs.<sup>4</sup> However, the critical dimension is the variation in program emphasis among the four types of schools. The number of institutions in each category with the exception of that for the junior colleges, was too small to enable us to rely on exact figures in our discussion, but differential

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<sup>2</sup>All of the tables in this report are presented at the end of each section in which they are discussed rather than in the text immediately following the discussion.

<sup>3</sup>For example, enrollment percentages for "the average school" were derived by computing the average figure from the enrollment percentages reported by the individual schools.

<sup>4</sup>These were: (1) two-year transfer programs, awarding an Associate of Arts degree; (2) two-year occupational programs, awarding an Associate of Applied Science degree; (3) shorter-term certificate programs, awarding a certificate of proficiency; (4) remedial programs; and (5) general programs. Remedial and general programs did not provide students with any degree credits.

program emphases were consistent enough to give us confidence in the general conclusions drawn.

As befits their raison d'être, the vocational-technical centers offered no transfer program whereas the branch campuses offered this type of program almost exclusively. Both junior colleges and technical institutes offered all three types of programs (transfer, occupational and certificate); there were, however, major differences in the proportion of students in each program.

#### Vocational-Technical Centers

Although the vocational-technical centers lacked a traditional transfer program, they did function as two-year colleges; with only one exception, every center had a two-year occupational program. Seven of the ten vocational-technical centers reported that over 50 per cent of their full-time students were enrolled in the two-year occupational programs, while only three schools reported that over 50 per cent of their full-time students were enrolled in the shorter-term certificate programs.

The program concentration for part-time students in vocational-technical centers is somewhat reversed, with centers reporting higher proportion of the part-time students enrolled in their certificate programs than in their two-year occupational programs. Four of the nine schools reported that more than 70 per cent of their part-time students were enrolled in the certificate programs, while only two schools reported this high a percentage in the two-year occupational programs. These findings thus emphasize the immediate job preparation or upgrading function of these institutions for part-time students.

### Branch Campuses

As previously noted, the curriculum of the branch campuses was almost exclusively limited to that of the traditional transfer program. In the average branch campus institution over 95 per cent of the full-time students and approximately 80 per cent of the part-time students were enrolled in the transfer program. The remainder of the students were classified as enrolled in "general education, no degree credit."

### Junior Colleges

Analysis of the 1969 enrollment statistics for the junior colleges confirmed the often-quoted finding that, in the average junior college, two-thirds of the students were enrolled in a transfer program. Average enrollment concentrations for the 57 junior colleges studied were as follows: 66 per cent of the full-time students were in a transfer program; 30 per cent were in a two-year occupational program; and 3 per cent were in a certificate program. Program enrollment patterns of the part-time students differed only slightly from those of their full-time peers. The percentage in transfer programs dropped to 60 per cent; the shift was into a general nondegree-oriented education, rather than an occupational degree program.

There were, however, wide variations among the junior colleges in emphasis on transfer programs. Of the 57 schools reporting enrollment, five were essentially the typical liberal arts junior college, with 90 per cent or more of their enrollment in a transfer curriculum; another 22 schools had 70 per cent or more of their students in this type of program. Thus, almost half of those reporting could be considered primarily academic institutions. Twenty of the schools could be regarded

as truly dual purpose colleges, with 50-69 per cent of their students in a transfer curriculum; the remaining 10 schools actually had a majority of their enrollment in an occupational program. A cursory examination of the school bulletins revealed that among this group of "junior colleges" were several former technical institutes that had only recently established a transfer curriculum. It would be important to see how educational philosophies and relative enrollment figures of these new "junior colleges" shift over time.

#### Technical Institutes

As expected, the technical institutes were essentially occupationally oriented. Almost three-fourths of the schools reporting had no students in two-year transfer programs. Nine of the 15 schools had more than 50 per cent of their students enrolled in the two-year occupational programs. The average enrollment for technical institutes was such that only 7 per cent of the full-time students were in a transfer program, while 85 per cent were in a degree or a certificate occupational program. However more of these students were enrolled in degree programs than in certificate programs. Enrollment concentrations of the part-time students indicated that the majority were in two-year occupational programs. The other popular program for the part-time students was the general, no degree-credit program in which the enrollment average was approximately 20 per cent.

One final finding on differential program emphasis among the four types of institutions is noteworthy. Very few schools reported any remedial or general education programs; but in junior colleges the proportion of students enrolled in such programs was even smaller than in any of the other three types of institutions.

### The Part-Time Students

Each type of school had a sizeable component of part-time students; an average of 40 per cent of the students in the 90 schools studied were enrolled part-time.<sup>5</sup> These students, like their full-time counterparts, were concentrated essentially in two-year degree programs. The finding that 80 to 90 per cent of the part-time students in the average branch campus and junior college, 50 per cent in the average technical institute, and 30 per cent in the average vocational-technical center were in such programs raises interesting questions for further research. Are these students in two-year programs because they want or need a two-year program? Or are they there because the schools do not offer enough short-term job training, general educational courses, or remedial work? In essence, the issue raised is one of determining whether the concentration of both full- and part-time students in two-year programs reflects the needs of the students, the requirements for entrance into the job market, or a traditional academic bias on the part of the public two-year college.

Richard Fulton, Executive Director of the United Business Schools Association, has challenged the public colleges on this point, stating that ". . . we shouldn't try to educate the whole man at our institutions. They don't need it and we can't afford it."<sup>6</sup> Certainly the private vocational schools, which have an enrollment approximately equivalent to the public junior college enrollment operate on a very different philosophy.<sup>7</sup>

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<sup>5</sup>This component appears to be highest in the branch campuses and lowest in the technical institutes, three of whom reported no part-time enrollment.

<sup>6</sup>George Nash, The University and the City (New York: Twentieth Century Fund, In Press), VI p. 17.

<sup>7</sup>A. Harvey Belitsky, Private Vocational Schools and Their Students (Cambridge, Mass.: Schenkman Publishing Co., Inc., 1969).



According to Morsch, who has recently completed a series of interviews with state officials and legislators in 7 states in connection with this project, legislators are also questioning the costs of the general education component of most two-year occupational programs.<sup>8</sup> Although the contribution of such education to the "fulfillment of the individual" has been recognized and encouraged by advocates of the two-year college, the goal of providing general education is a very costly one; it is perhaps even dysfunctional for the student, in encouraging unrealizable aspirations, and for the labor force, in encouraging overtraining and subsequent job dissatisfaction.<sup>9</sup>

#### Educational Costs

Direct tuition charges varied widely. Table II-2 presents the distribution of tuition costs per year for "in-district," "in-state," and "out-of-state" full-time students in the 90 schools on which such information was available.

#### Tuition

The two-year colleges generally functioned as "community" colleges, presenting low-cost or "free" tax-supported education to their own residents. This preferential treatment was most noticeable among the technical institutes and vocational-technical centers, two-thirds of which charged no tuition to in-district students. The tuition in these schools never exceeded \$400 a year; the average cost was approximately \$200 which is very close to the average cost of approximately \$250 in the junior colleges.

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<sup>8</sup>William C. Morsch, Seven State Systems of Community Colleges (Washington, D.C.: Bureau of Social Science Research, 1970).

<sup>9</sup>For a persuasive argument on the dysfunction of overtraining, see Ivar Berg, Education and Jobs: The Great Training Robbery (New York: Praeger, 1970).

### Fees

In addition to no or low tuition costs, the student in an average two-year college also paid very few fees. At least two-thirds of the schools reported that there were no required fees for registration, laboratory courses, or physical education; half reported that there was no application fee. Only about 40 per cent required activity or graduation fees. Again, there were fewer fees (even laboratory fees for vocational courses) among the occupational schools than among junior colleges and branch campuses.

These findings represent a most surprising and most significant departure from the "nickel and dime" assessment of incidental costs so characteristic of our "free" public school system, and suggest that in this regard the public two-year college may be less costly to the student than was his high school.<sup>10</sup>

Among those schools who did assess fees, the average amounts required were relatively modest--usually \$5.00-10.00, with perhaps a \$15 activity fee for the full-time student. If a student were required to pay all of the nine kinds of fees<sup>11</sup> included on the institutional data form, the total charge for fees would be \$65-75. Assuming that he paid tuition, his total costs for tuition and fees would be about \$300-350 a year in the junior colleges and branch campuses and about \$250-300 in the occupational schools.

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<sup>10</sup>Leonard Goodman and Thelma Myint, The Economic Needs of Neighborhood Youth Corps Enrollees (Washington, D. C.: Bureau of Social Science Research, 1969).

<sup>11</sup>Viz, application fee, registration fee, laboratory fee for academic course, laboratory fee for vocational course, physical education fee, health fee, insurance, activity fee, and graduation fee.

### Institutional Instructional Costs

These direct costs to the student are of course only a fraction of the actual cost of his education. Morsch's cost analysis of program instructional costs in 20 of the sample schools indicated an average student-year instructional cost of \$756 for the 193 occupational programs and \$557 for the 63 transfer programs surveyed.<sup>12</sup> According to these findings, the typical student contributes to about 64 per cent of the instructional cost if he is in a transfer program and 40 per cent if he is in an occupational program.

The question on the institutional form requesting an average per student cost to the institution for each type of program elicited very little usable data. About half of the schools were not able to make such an estimate, although some indicated that they were developing such figures. Among those who attempted an answer, a large proportion equated institutional costs with direct charges to the student, ignoring or being unaware of the real costs of educating their students. A further indication of the lack of cost accounting sophistication among two-year college administrators was the finding that only 30 per cent of the schools kept financial records in a manner that enabled them to provide cost data by specific program or course. Morsch's study corroborates this lack of program budgeting.

The few schools that did estimate "the average costs per full-time student to institution" tended to report much higher figures for both transfer and occupational programs than those indicated by Morsch's cost

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<sup>12</sup>Op. cit., p. 1.

analysis; the median cost estimate for both programs, even including those from schools who had obviously misinterpreted the question, was \$1,000-1,300.

#### Living Expenses

Assessment of living expenses was another area in which the school administration did not provide much usable data. Half of the schools did not (or could not) estimate these costs. Unlike the traditional four-year college, the two-year college is primarily a nonresidential commuter school. Only 2 of the 80 schools who completed an institutional data form reported that they had provisions for on-campus housing and could quote in their college catalogues minimal budget figures for living expenses. Obviously life styles would vary tremendously among a commuting population, and any attempt at an average living cost figure for such a group would be unrealistic.

#### Financial Aid

The low direct charges to the student may be related to the finding that very few of the students in the two-year colleges appeared to receive any financial aid.

According to the administrators, there were seven kinds of financial aid resources available for students in two-year colleges: full-tuition scholarships, part-tuition scholarships, GI Bill, federal loan programs, state loan programs, work study programs, and industrial training programs. However, only the GI Bill was estimated to be used by 10 per cent of the full-time students; the remaining sources were estimated each to be used by only 2-3 per cent of the students. The

infrequent use of financial aid resources was constant by type of school, with the exception that all seven of these resources were tapped even less frequently by students in vocational-technical centers who might have eligibility problems than by others.

A comparison of administrator and student responses suggests, however, that the administrators tended to underestimate the use of financial aid resources by students in the two-year colleges. As discussed in Section III, approximately one-fifth of the students reported that they did receive financial aid from one of the sources mentioned above.

#### Student Body Characteristics

Each administrator was asked to present a demographic profile (age, ethnic origin, and geographical background) for his student body. Availability of information varied for each variable; 73 schools provided data on age distribution for full-time students; 71 on ethnic origin; and 67 on geographical origin.

##### Age

The full-time population in two-year colleges was predominantly young, as attested to by the figures in Table 11-3. Almost half of the schools reported that 70 per cent or more of their full-time students were under 20 years of age. On the other hand, the adult education function of the two-year college was evident, as approximately three-fourths of the schools reported some full-time students who were 40 years or older; the percentage enrollment in such cases, however, did not exceed 20 per cent of total enrollment.

The part-time students were generally older than their full-time counterparts. Only approximately 40 per cent of the part-time students

in branch campuses, 25 per cent of those in junior colleges, and 5 per cent of those in technical institutes were under 20 years of age. Part-time enrollment proportions for the under 20 age group ranged from none in some schools to over 70 per cent in others. The latter schools did not require a high school diploma, making their services available to those of high school age who had dropped out. Apparently, some of these young people were taking advantage of the opportunities afforded by this liberal admission policy, on a part-time as well as a full-time basis.

#### Ethnic Origin

The student population in the two-year colleges that responded to this question (nonresponse rate was 21.1 per cent) was predominantly white; although six junior colleges, two technical institutes and two vocational-technical centers reported that 30 per cent or more of their student body belonged to a minority group,<sup>13</sup> the median for the schools as a whole was only five per cent. Minority group enrollment was lowest in the branch campuses and technical institutes, averaging less than two per cent in each case.

#### Community Background

Table 11-4 presents the estimates reported by 67 administrators regarding the community background of their students. The average

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<sup>13</sup>Of the schools reporting 30 per cent or more of their student body belonging to a minority group, the technical institutes and vocational-technical centers were concentrated in Georgia and North Carolina; the junior colleges were in California, Michigan, Mississippi, and New Jersey.

two-year college recruits 25 per cent of its students from rural areas, 35 per cent from suburbia, and 40 per cent from urban areas.<sup>14</sup> However, there were variations among the colleges, largely associated with the physical location of the school. The average junior college has the highest urban component, comprising about 45 per cent of the total full-time student population in these schools. Branch campuses serve a primarily suburban clientele; vocational-technical centers draw almost half of their students from rural areas. Technical institutes serve either a rural or urban population, depending upon the location of the school, and have the smallest component of suburbanites (averaging about 20% of the student body).

The major difference between the full-time and part-time student body distributions was the higher proportion of urban residents among the part-time population. This finding was largely due to the reports from occupational schools in urban centers which were most likely to have a large part-time student body.

In summary, community background characteristics of the student body are strongly influenced by the physical location of the college. This relationship is heightened by the common practice of charging out-of-district tuition and the even more frequent practice of charging high tuition costs for out-of-state students. Local tax payers, who bear a major share of the costs of most community colleges, prefer to serve their own. The student populations were thus somewhat "inbred" through discriminatory tuition policies; the schools, consequently, may be lacking the vitality which could be generated by a population mixture.

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<sup>14</sup>It should be remembered that "urban" here does not mean central city of a SMSA, but the more standard use of the term to designate those "from the city," whatever its size.

Nonetheless, as we shall discuss in more detail in the student chapter, there is not complete congruence between school location and student residence, particularly in central city schools, where place of work may influence school attendance. For example, it may be easier for a suburbanite to stay downtown after work and go to school in a central city college than it would be for him to endure the rush hour traffic in order to attend his local suburban institution.

#### Faculty Characteristics

Two-thirds of the junior colleges and technical institutes reported that more than 70 per cent of their faculty worked on a full-time basis, whereas the average branch campus and vocational-technical center reported that about half of their teachers worked on a part-time basis. This employment pattern was probably related to the higher proportions of part-time evening students in the latter two institutions. The staff was also relatively stable. The average turnover rate between 1968 and 1969 was only 7 per cent for the 73 schools reporting on this variable. However, largely because of expansion, the schools increased their faculty size an average of 16 per cent during that same period, varying from 13 per cent in vocational-technical centers to 20 per cent in technical institutes.

#### Sources of Staff

As shown in Table II-5, the largest number of staff recruitment came from outside the educational fraternity; this finding was largely attributed to the heavy reliance on such sources by the occupational



schools. Branch campuses recruited primarily from graduate schools, while junior colleges recruited equally from graduate schools and from the ranks of high school faculty. High school teachers were also an important source of staff for technical institutes, but not for branch campuses and vocational-technical centers. Few recent college graduates and very few retired military personnel were also recruited for teaching in two-year colleges. The results obtained from faculty respondents generally substantiated the administrative reports with the exception that administrators underestimated mobility from one two-year college to another (see Section V, Table V-27).

#### Educational Qualifications

Table II-6 presents the distribution of the highest academic degrees held by the full-time teaching staff. Again, as might be expected, the overall picture obscures very real differences among the schools. The average junior college and branch campus reported that the proportion of full-time faculty who have a master's degree was 70 per cent or more; the educational qualifications of faculty members were more varied, however, within the occupational schools. Technical institutes reported an average of 40 per cent of teachers with B. A.'s, 25-30 per cent with M. A.'s, and 15 per cent with a high school diploma only. The remaining had an Associate degree. The proportion of those with no formal degree beyond high school increased to 40 per cent for the average vocational-technical center. Furthermore, the vocational-technical centers reported that a third of their staff had B.A.'s and only about 10 per cent had a master's degree; while the remaining had an Associate degree. It is interesting to note the relative lack of

staff with M. Ed. and Ed. D. degrees in the schools as a whole. Of the four types of schools, the junior colleges were most likely to have staff members with these degrees and the vocational-technical centers least likely.

While data for part-time staff were much less complete, they tended to follow the same general pattern as that of the full-time faculty.

#### Articulation With Other Schools

The final group of questions on the institutional data form were designed to determine the manner in which these somewhat interstitial schools articulated with other parts of the total educational system. The two-year college had more geographically restricted attendance areas than the four-year institution. None of the 78 schools that defined the geographical area from which they drew the majority of their students included the whole state in that definition. The schools were instead county or region oriented. Junior colleges were most likely to service a single county; the other three types of schools more often drew their students from several counties or a part of the state; e.g., "the north-western quarter."

#### Service Areas

These service areas typically included several high schools from which a student population could be drawn; the median number of secondary schools in the attendance area was 45 for the branch campuses; 28 for the junior colleges; 35 for the technical schools; and 15 for the vocational-technical centers. The finding that the vocational-technical centers, even though they may serve several counties, had markedly fewer

schools to draw from should be treated with caution insofar as less than 40 per cent of the vocational-technical centers in the sample were located in densely populated areas. Although the administrators generally knew the number of high schools in the county or region from which their students came, they were less sure about the number of graduates and where they went after graduation. An attempt to discover what proportion of this population attended college elicited a "no-answer" rate of 56 per cent. The necessary figures were simply not available.

One reason for their inability to gauge their "share of the market" may be that a surprisingly large number of colleges and vocational-technical centers were in the same geographical service area. Table 11-7 presents a distribution of the estimates for each kind of school for the 80 schools that furnished data on this question.

Inspection of Table 11-7 indicates that the respondents knew more about the public educational sector than the private one, and knew very little about the proprietary vocational schools. However, even though they might not know the exact number of each individual type of institution, they were generally confident of their estimate of the total number of postsecondary schools in the area. The large number of institutions that could either compete with or complement the two-year college program demonstrates the great need for close articulation among the schools if the needs of students are to be met efficiently.<sup>15</sup>

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<sup>15</sup>It should be remembered that, although they are not discussed here, the often extensive adult education programs in the high schools are another important source of potential program depth or unnecessary overlap.

Some interesting policy issues arise when we look at the answers to a series of questions about how curriculum offerings and policies are affected by the presence of these other institutions in the service area (Table II-8).<sup>16</sup>

#### Coordination With State Universities

Over three-fourths of the junior college transfer programs were quite obviously modeled after the lower division requirements of the local state university. Whether or not this close coordination may make it difficult for a student to transfer to an out-of-state college or to a private college is an important issue.

#### Admission Policies

Although their transfer curricula are geared to that of the state university and although transfers are encouraged by the four-year colleges, the majority of the junior college administrators agreed that their admission policies were less restrictive than those of the four-year colleges. The contradiction of aspirations apparent in these two statements is of course the perennial junior college problem.<sup>17</sup> Somewhat surprisingly, less than half of the administrators in the occupational schools considered their admission policies as less restrictive than those of other postsecondary schools. Some of the technical institutes were quite proud of their high standards; and 6 of the administrators from 11 vocational-technical centers stated that their standards were as high as those of other institutions.

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<sup>16</sup>The two branch campuses in the survey were not used in this analysis since three of the seven questions did not apply to their situation.

<sup>17</sup>See Knoell, D.M. and Medsker, L.L., From Junior to Senior College: A National Study of the Transfer Student (Washington, D.C.: American Council on Education, 1965).

Coordination Among Two-Year Colleges

None of the four school types were concerned about possible low enrollment problems because of program duplication. Half of the administrators in each type of school agreed that there was coordination between junior colleges and vocational-technical centers to avoid unnecessary overlap in vocational instruction. Half of the administrators in technical institutes and vocational-technical centers stated that their schools did not provide curricula already well-established elsewhere and that other institutions had no effect on their offerings-- indicating the specialized nature of these occupationally-oriented institutions. It seems pertinent to point out that the ratio of enrollment to capacity showed that only a third of the 76 schools reporting capacity figures had enrollments of 90 per cent or more of capacity. Computations of the enrollment capacity ratio for both full- and part-time students are given in Table II-9. The internal distributions on this variable were remarkably similar for junior colleges and vocational-technical centers (35-36 per cent at capacity for full-time; 43-46 per cent for part-time). Technical institutes appear to have more open places than other schools, with only 27 per cent at capacity for full-time students and 21 per cent for part-time students. Further evidence that capacity was not a critical problem for most schools was provided by the finding that, among applicants for the 1968 fall class, an average of only one per cent were turned away because of lack of space in the junior colleges, five per cent in the technical institutes, and eight per cent in the vocational-technical centers. On a school rather than on an enrollment basis, capacity was a problem for 15 per cent of the junior colleges, 30 per cent of the vocational-technical

centers, and 54 per cent of the technical institutes. This last finding poses an apparent contradiction. Fewer technical institutes showed capacity enrollments yet more of them turned away students for this reason. The inconsistency may be explained by the anomaly, perhaps too often found, of empty places in one curriculum, and superfluous applications in another. The prevalence of program fads which may not be related to actual manpower needs is an important area for further research.

Although capacity figures are extremely difficult to figure precisely, the fact still remains that for whatever reason (optimism about expandability, or unrealistic or invalid reports) computations on figures provided by the administrators described a generally undercapacity situation.

#### Role of Institution in The Education System

The administrators' answers to the questions on articulation (discussed above) and their predictions of future career patterns for their students (to be discussed below) present a more complete picture of the administrator's view of the role of his institution in the total state system of higher education than do their responses to the direct question asked in this area.<sup>18</sup> The most consistent reply to this open-ended inquiry was that the school was included in an adopted or proposed state master plan (reported by about 40% of the schools in each group). At the school level, individual development program plans could be furnished by only a third of the schools. These school administrators

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<sup>18</sup> "What role does your institution now have in the total system of higher education in your state?"

were often too caught up in their present problems to plan ahead; however, several indicated that such plans were being developed.

Table II-10 presents the predictions for career paths of students in the average school, as compiled from the administrators' estimates. It is evident that slightly more than half of the students are expected to complete their programs while only one-fourth are expected to drop out.

Differences in school function became very evident when the administrators' estimates were compared for students in each type of school. For example, more transfers before completion were expected for junior college students; 45 per cent of the technical institute students and 60 per cent of those in the vocational-technical centers were expected to enter the job market without further formal training; and 25-30 per cent of the junior college students were expected to go on with further academic training. Only five per cent in any group were expected to take further vocational training.

Comparing the administrators' predictions with factual data obtained from graduates of two-year colleges (discussed in detail in Chapter IV), it is evident that the administrators tended to underestimate the proportions of students who continue educational pursuits. Junior college graduation was educationally terminal for fewer than 30 per cent of the graduates; the remainder continued their academic endeavors, either full-time or part-time. Perhaps the most interesting finding was the fact that, although the technical institutes and vocational-technical centers were viewed as terminal work oriented institutions, some of their graduates still sought additional education.

## SECTION II TABLES

Note: Although the Total number of schools was 90, the N for schools varies from table to table, dependent on the availability of information. Further, the row percentages in each table may not add up to 100.0 per cent due to rounding.

Further, the percentage distributions in the tables represent the responses given by administrators and should be read in the following manner: Table II-1, for example, "25 per cent of the administrators report that they have no two-year full-time transfer students in their schools."



TABLE II-1  
SCHOOLS, BY PROPORTION OF STUDENTS IN EACH MAJOR PROGRAM  
(In Percentages)

Program	Per cent of Students Enrolled					
	0	1-19	20-39	40-49	50-69	70 or More
A. Full-Time Students (84 Schools)						
Two-year transfer	25.0	4.8	7.2	3.6	23.8	35.7
Two-year occupational	3.6	25.0	33.3	10.7	13.1	14.2
Certificate	44.0	36.9	7.2	4.8	4.8	2.4
Remedial, no degree credit	79.8	17.9	2.4	-	-	-
General, no degree credit	91.7	8.4	-	-	-	-
B. Part-Time Students (74 Schools)						
Two-year transfer	28.4	1.4	10.9	5.4	27.0	27.1
Two-year occupational	16.2	24.3	32.4	8.1	8.1	10.9
Certificate	59.5	28.4	5.4	1.4	-	5.4
Remedial, no degree credit	83.8	12.2	1.4	1.4	1.4	-
General, no degree credit	82.4	5.5	5.5	-	2.7	4.1

TABLE 11-2  
SCHOOLS, BY TUITION COSTS PER YEAR FOR FULL-TIME STUDENTS  
(Percentage of Schools in Each Category)

	None	Less Than \$199	\$200- \$399	\$400- \$799	\$800 and over	No Answer
In-district	43.3	22.2	26.7	6.7	-	1.1
In-state	22.2	24.5	31.1	14.4	5.5	2.2
Out of state	4.4	6.6	31.1	34.5	20.0	3.3

TABLE 11-3  
SCHOOLS, BY PROPORTION OF STUDENTS IN EACH AGE CATEGORY  
(In Percentages)

Age	Per cent of Students					
	0	1-19	20-39	40-49	50-69	70 or More
A. Full-Time Students (73 Schools)						
Under 20	-	2.8	13.7	13.7	20.5	49.3
20-24	-	52.1	38.4	6.8	1.4	1.4
25-29	5.5	89.1	5.5	-	-	-
30-39	12.3	86.3	1.4	-	-	-
40-49	23.3	76.7	-	-	-	-
50 or more	46.6	52.1	1.4	-	-	-
B. Part-Time Students (62 Schools)						
Under 20	11.3	30.6	32.3	4.8	11.3	9.7
20-24	8.1	24.2	54.9	8.1	1.6	3.2
25-29	9.7	40.3	41.9	3.2	1.6	3.2
30-39	17.7	59.7	21.0	1.6	-	-
40-49	21.0	75.8	3.2	-	-	-
50 or more	35.5	63.0	1.6	-	-	-

TABLE 11-4  
SCHOOLS, BY PROPORTION OF STUDENTS FROM EACH LOCATION  
(In Percentages)

Location	Per cent of Students					
	0	1-19	20-39	40-49	50-69	70 or More
A. Full-Time Students (67 Schools)						
Rural	6.0	37.3	17.9	11.9	13.4	13.5
Suburban	13.4	20.9	34.3	6.0	11.9	13.5
Urban	11.9	16.5	20.8	13.4	14.9	22.4
B. Part-Time Students (54 Schools)						
Rural	20.4	37.0	16.7	1.9	11.1	13.0
Suburban	18.5	14.9	37.0	5.6	9.3	14.8
Urban	20.4	7.4	20.4	7.4	14.8	29.6

TABLE 11-5

SCHOOLS, BY MAJOR SOURCES OF NEW STAFF  
(Distribution of Per cents in Each Category for 73 Schools)

Source	Per cent of New Staff					
	0	1-19	20-39	40-49	50-69	70 or More
High school teacher	21.9	28.8	32.8	4.1	11.0	1.4
Undergraduate school	63.0	28.7	4.1	1.4	2.7	-
Graduate school	28.8	31.5	30.1	2.7	2.7	4.1
Other two-year college	31.5	48.0	17.8	1.4	1.4	-
Four-year college	45.2	37.0	11.0	2.7	2.7	1.4
Outside education	12.3	31.5	27.4	5.5	11.0	12.3
Retired military	80.8	17.8	1.4	-	-	-

TABLE 11-6

SCHOOLS, BY EDUCATIONAL QUALIFICATIONS OF FULL-TIME TEACHING STAFF  
(Distribution of Per cents With Each Kind of Degree for 74 Schools)

Highest Degree	Per cent of Teaching Staff					
	0	1-19	20-39	40-49	50-69	70 or More
High school diploma	55.4	25.7	6.8	5.4	2.7	4.1
A.A., A.A.S., A.S.	60.8	35.2	4.1	-	-	-
B.A., B.S.	9.5	45.9	24.3	8.1	12.2	-
M.A., M.S.	6.8	10.9	13.5	10.8	21.6	36.5
M.Ed.	40.5	50.0	6.8	2.7	-	-
Ph.D.	40.5	56.8	1.4	1.4	-	-
Ed.D.	67.6	32.4	-	-	-	-

TABLE 11-7

SCHOOLS, BY ESTIMATED NUMBER OF OTHER POSTSECONDARY INSTITUTIONS  
IN ATTENDANCE AREA  
(Distribution of Per cents in Each Category for 80 Schools)

Type of School	Number of Schools								
	0	1	2	3	4	5-9	10-15	16+	Don't Know
Public junior college	35.0	30.0	12.5	8.8	1.3	5.0	5.0	-	2.5
Private junior college	68.8	15.0	6.3	2.5	1.3	1.3	-	-	5.0
Public technical school	41.3	27.5	5.0	8.8	5.0	2.5	-	-	10.0
Proprietary school	25.0	17.5	7.5	7.5	3.8	10.0	3.8	3.8	21.3
Public college, university	28.8	36.3	17.5	3.8	5.0	5.0	-	-	3.8
Private college, university	33.8	15.0	16.3	11.3	5.0	11.3	-	1.3	6.0
Total number of other schools in attendance area	7.5	5.0	5.0	11.3	10.0	25.0	17.5	17.5	1.3

TABLE 11-8

## EFFECTS OF OTHER INSTITUTIONS ON SCHOOL CURRICULUM AND POLICY (80 SCHOOLS)

Statement	Per cent of Schools in Agreement With Statement	
	Junior College	Technical Institute, Vocational Center
Our transfer curriculum is geared to the lower division requirements of the state university. . . . .	76.9	-
Other postsecondary institutions have more restrictive admissions policies, in effect encouraging certain students to attend our institution. . . . .	75.0	46.2
We do not provide curricula already well-established at other postsecondary institutions . . . . .	7.7	42.3
Four-year institutions in our area actively encourage transfer students from our institution. . . . .	80.8	11.5
Unnecessary duplication of programs in several postsecondary institutions in our area creates low-enrollment problems in some of our curricula. . . . .	1.9	3.8
The junior colleges and vocational-technical schools are coordinating areas of vocational instruction to avoid unnecessary overlap . . . . .	50.0	42.3
Other institutions in our service area have no effect on curriculum offerings and policies in this institution . . . . .	9.6	42.3



TABLE 11-9

RELATION OF ENROLLMENT TO CAPACITY  
(Distribution of Per cent in Each Category)

Student Status	Per cent (Capacity) <sup>a</sup>			
	Less Than 49	50-69	70-89	90 or More
Full-time students (76 schools)	9.1	26.3	31.6	33.0
Part-time students (74 schools)	17.6	17.6	27.0	37.8

<sup>a</sup>Full-time enrollment divided by full-time capacity, and part-time enrollment divided by part-time capacity.

TABLE 11-10

PREDICTION OF CAREER PATH FOR THE AVERAGE SCHOOL  
(69 Schools)

	Mean Percentage of Students
Dropout before completion. . . . .	25
Transfer before completion . . . . .	10
Interrupt studies, eventually complete . . . . .	10
Graduate, enter job market . . . . .	25
Graduate, further vocational training. . . . .	5
Graduate, further academic training. . . . .	25

### III. STUDENTS

Underlying the study design was the proposition that institutions and students "select" each other. We expected to find differences in student characteristics associated with differences in institutional settings and program offerings, and have consequently organized the data in a way that will permit comparisons by both program and type of school. But these are not the only critical dimensions that must be taken into account. We know from previous research that student status (full- or part-time) and sex can accentuate or cancel apparent distinctions among enrollees in different kinds of programs. Thus the data are also analyzed separately by sex and student status.

A major problem encountered in planning the analysis was deciding upon an operational definition for the variable of "program." The study objectives called for comparisons of students in "academic" and "occupational" programs. Preliminary analysis of the data indicated that the traditional eight major subject area categories used to define courses of study were unsatisfactory as major categorizing variables. First, they were unwieldy. Second, many of their cells would be too small to warrant analysis. Third, and most important, students in each of the eight programs could, and did obtain an A. A. or A. S. degree, (See Table IV-1 in the chapter on graduates.)<sup>1</sup> Therefore, the decision

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<sup>1</sup>These findings are corroborated by those from the BSSR Follow-up study of 1966 junior college graduates in vocational-terminal programs. Not only did 70 per cent of the "terminal" graduates in this study receive an A. S. or A. A. degree, but over 50 per cent of the total sample took further study or training, most frequently in a four-year college.

was made to organize the data on the same degree-certificate dichotomy found usable and useful in the institutional analysis.<sup>2</sup> The result was a four-level analytical design, splitting the sample first by sex, second by student status, third by type of program, and fourth by type of school.

Even with a sample of 7,673 a four-level break such as that described above results in some cells that are too small for analysis, and loss of cases where there is no information given on critical stratifying variables. However, the "no answer" rate was low (1.5%) on both student status and program and was equally distributed across type of school. Examination of the distribution of students revealed that 30 of the theoretically possible 64 cells generated by the analysis plan were too small to yield reliable results; these cells were then either collapsed or dropped from the analysis.<sup>3</sup> Loss of cases because of lack of categorizing information (242) and loss through cell elimination (320) resulted in a final analytical sample of 7,111 rather than 7,673. Most of the analyses discussed in this chapter are based on the population of 7,111.

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<sup>2</sup> Although many schools grant an Associate of Applied Science degree which is more technical in nature than the traditional A. A., the A. A. S. is considered a two-year degree and evaluated as such when a student applies for admission to a four-year college. (Source was Association of College Registrars).

<sup>3</sup> See Table III-1 for a distribution of the total sample of 7,763 students. Eliminated cells were:

1. Both full- and part-time students in certificate programs in the branch campuses. These four cells included a total of 16 respondents.
2. Part-time students in technical institutes and vocational-technical centers where the total number in the 12 cells was 179.
3. Part-time students in branch campuses where the total number in the 6 cells was 125.
4. The group of full-time students taking only nondegree course work were treated as a total group resulting in the elimination of 6 cells, but no cases.

### Demographic Characteristics

Each student was asked a standard battery of questions about himself and his background--age, ethnic status, sex, marital status, and community and socioeconomic background. As previously discussed, administrators were also asked to describe their student body on three of these variables--age, ethnic status, and community background. The two sets of answers cannot be compared directly. First, the administrative sample was treated on a school rather than on an enrollment basis. Schools outside an SMSA were somewhat "over represented"; this disparity between the two samples makes comparisons of the findings particularly hazardous. Under the circumstances no attempts at comparison of the two sets of data will be made.

#### Age and Sex

Age distributions are shown in Table III-2. The sample was a young group. The median age of 19-21 for full-time students was remarkably similar across all levels of analysis, indicating that at least half of these first- and second-year college students had come to college directly from high school. The actual proportion of the total sample graduating from high school in 1967 or 1968 was 57 per cent. As expected, junior college part-time students, on the average, were six to seven years older than their full-time peers.

There were more females than males in both the "16-19" and the "over 30" age categories for both full- and part-time students in all program areas; the proportion of males was higher in the "20-24" age category. However, basically the sample as a whole tended to be

disproportionately male (60.3 per cent), especially among the full-time students (63.1 per cent). The proportion of part-time female students was 47.3 per cent.

### Ethnic Status

Minority group representation within the sample was 7 per cent for males and 11 per cent for females.<sup>4</sup> Among the females, as seen in Table III-3, minority group membership was directly related to both student status and program; there were relatively few minority group students in full-time degree programs (8%), but twice as many (16%) among part-time junior college students. The proportion of Blacks,<sup>5</sup> Orientals, and Spanish-speaking ethnic groups among the male students varied very little by program among full-time students, although there was a difference based on location of school (see section below on size and location of schools).

The highest percentage of ethnic minority group members as found in the junior colleges and the lowest in the branch campuses. The overall percentages in each type of school for the total respondent group of 7,673 were as follows: 10 per cent in junior colleges 8 per cent

<sup>4</sup>Four per cent of the total sample of students did not answer this question, raising the possibility that the minority group membership in the sample might be slightly higher than the figures quoted above.

<sup>5</sup>The proportion of the Blacks in the total student sample was only 5 per cent. Of these, 61.2 per cent were registered as full-time students. Nearly three-fourths of the Blacks were in junior colleges, e.g., 36.6 per cent of the total group of Blacks were in full-time degree programs, 19.5 per cent in part-time degree programs, and 27.8 per cent in either certificate or course-only programs. The percentage of Blacks in other types of schools were all smaller than 10 per cent. See the further discussion regarding the distribution of Blacks by size and location of schools.

in vocational-technical centers, 5 per cent in technical institutes, and 2 per cent in branch campuses. The relatively low minority group representation in the occupational schools was surprising since 14 of these 26 schools were located in the south; and these 14 schools were also predominantly if not exclusively white.

The public two-year college, particularly the urban community college, has attempted to recruit students from all ethnic groups; however, there has been little change in their representation in the student bodies of these institutions between 1966-69. The ACE reports representations of 11-16 per cent among entering junior college freshmen for these years; the proportions are similar to those found in the senior colleges.<sup>6</sup>

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#### Marital Status

The relatively young full-time student population was generally unmarried; the older part-time student was married. There were a number of women from broken marriages seeking further education; almost 10 per cent of the part-time female students were widowed, divorced, or separated. Marital status by sex and student status is shown in Table III-4, while the total distribution is presented in Table III-5.

#### Community Background

Although 29 per cent of the total student sample (N = 7,673) attended a college located in a city of 100,000 or more, only 17 per

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<sup>6</sup> See American Council on Education, National Norms for Entering College Freshmen (Washington, D. C. : American Council on Education, Fall 1966, 67, 68, and 69).

cent of the total sample had attended high school in a city that large. When we compare community background with school location, as shown, in Table III-7, we find that the "central city"<sup>7</sup> junior colleges had the largest proportion of students from cities of 10,000 or more; but, even here, almost half of the student body came from a suburb, a small town, or the open country.

Higher proportions of the part-time students than the full-time students were from urban backgrounds. Twenty-five per cent of the part-time junior college students had attended high school in a city of 100,000 or more; the comparable proportion for full-time students was 18 per cent (Table III-6).

#### Socioeconomic Background

Using father's major occupation as the best indicator of socioeconomic background, we find that the two-year colleges were essentially lower middle class institutions. Over half of our respondents came from homes in which the father was a skilled or semi-skilled tradesman or service worker, while a third had higher status backgrounds. In Table III-8 it can be seen that the distributions on this variable were similar for both sexes and for all programs.

Variations in socioeconomic background by type of school were minor and not always consistent. (See, however, further discussion below on section regarding the size and location of schools.) The contrast was evident, however, between the two-year college and the public four-year

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<sup>7</sup>A city of at least 50,000 or more inhabitants designated as the principal city in an SMSA.

college which draws higher proportions of its clientele from higher status backgrounds.<sup>8</sup> The community college was designed to make education relatively accessible to the lower middle class group, and our findings indicate that it is accomplishing this aim.

Additional data on parental educational attainment indicated that approximately 30 per cent of the fathers and 28 per cent of the mothers of both male and female students had had some postsecondary education (Tables III-9 and III-10). The rate of high school completion was higher for the mothers (65 per cent) than for the fathers (56 per cent); the rate of college completion, however, was higher for the fathers than for the mothers.

#### Financial Background

Student estimates of total family income during their last year of high school were appreciably lower than the national median family income of \$15,845 reported for all entering college freshmen in fall 1966<sup>9</sup> but higher than the 1965 national white-family income of \$7,170.<sup>10</sup> The median income for families of male students was \$8,628; for those of female students it was \$8,216. Mean and median income figures are presented in Table III-11, and the complete distribution can be

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<sup>8</sup>It would seem that the parents of students in two-year colleges are slightly less educated than parents of students in four-year colleges. For instance, in the ACE Study of 1967 four-year College Freshmen, it was found that the average parents were at least college graduates. (National Norms for Entering College Freshmen, Washington, D.C.: American Council on Education, Fall 1967, p. 32.)

<sup>9</sup>National Norms for Entering College Freshmen (Washington, D.C.: American Council on Education, Fall 1966), p. A. 15.

<sup>10</sup>U.S. Department of Commerce, Bureau of the Census, Statistical Abstract (Washington, D.C.: U.S. Government Printing Office, 1967), p. 335.



found in Table III-12. The income figures were in the \$8,000-10,000 range for all full-time students. There was a trend suggesting that the students in junior colleges came from higher income backgrounds than those in any of the other two-year institutions, followed by the branch campuses, then the technical institutes, with students from vocational-technical centers coming from the lowest family income backgrounds. Similarly, for full-time students of both sexes (but especially for males), family income rose by program type in the following order: certificate, degree work and course work. This might be interpreted to mean that the certificate program students were those who were in relative financial need and were consequently seeking post-high school education essentially geared for employment, while those taking courses that did not terminate in degrees or certificates were those who were better equipped financially to do so. The apparently lower income levels reported by part-time junior college students may well be an artifact of inflation. Whereas 79 per cent of the full-time students had graduated from high school in 1966 or later, only 28 per cent of the part-time students had been in high school that recently. The \$8,000-\$8,500 for this group would come much closer to the full-time mean of \$9,000-\$9,500 if it were converted into 1968 dollars.

#### Size and Location of Two-Year Institution Attended

As mentioned earlier, while the sample as a whole tended to be disproportionately male (60.3 per cent), especially among the full-time students, the location of the school seemed to make a slight difference in the sex ratio of the student body (Table III-13). The suburban schools had a higher proportion of females than did the schools in the

central city, while the students at the schools outside the central city were predominately male. The proportion of males going to school full-time at suburban schools was 58.1 per cent; in the central city, it was 63 per cent, and 67.4 per cent at schools outside the central city. For part-time students at these different locations, the differences in sex ratios were minor, although suburban schools still tended to have a more even sex ratio. While the sex ratios at schools with different sizes differed somewhat, there was no consistent trend in any particular direction.

Looking at the age group 18-19, which contains the largest proportion of students who have enrolled in postsecondary institutions directly after high school, we see that the schools within the central city had the smallest proportion of students in this age group (Table III-14). Generally, suburban schools seemed to have a younger full-time student body than other schools. Part-time students, in general, tended to be older than their full-time counterparts. However, the age differential for part-time students did not vary significantly by location of school. Finally, there appeared to be a mild, positive relationship between the size of the school and the average age of the student body; in general, the larger the school, the lower the average age for both part-time and full-time students.

As to be expected, schools in the central city tended to have slightly higher proportions of minority students than did schools in the suburbs or outside the central cities (Table III-16). These proportions varied somewhat by the size of the school, the general trend being the larger the school, the higher the proportion of minority

students. One type of school, the junior college of 5,000-9,999 students located in the central city, showed a disproportionately high percentage of 20.7 per cent minority members, of which 20.3 per cent were Blacks.

As with the distribution of all minority group members, schools in the central city had slightly higher proportions of Blacks, with 7 per cent of their full-time student body, compared to 4.3 per cent at schools outside the central city and 3.1 per cent at the suburban schools being Black. For part-time student status, the proportion of Blacks was even greater at the central city schools: 8.5 per cent of the part-time students were Blacks, compared to 5.6 per cent at suburban schools and 3.0 per cent at schools outside the central city.

The size of the school seemed to have little influence on the proportion of the student body which was Black, varying inconsistently only one or two percentage points.

The location of the school appeared to make a slight difference in the marital status of its student body: the majority (87.1 per cent) of the full-time students at suburban campuses were not married, while lower proportions of full-time students at schools in the central city (79.5 per cent) and outside the central city (80.8 per cent) were single.

There did not seem to be a great deal of difference in the marital status of students at different sizes of schools; large campuses as well as small had full-time student bodies which were predominately unmarried, while the part-time students at all sizes of schools were predominantly married.

Students at suburban schools indicated higher average family incomes, with students at central city schools next, while students enrolled in schools outside the central city had the lowest average family income background (Table III-17).

There appeared to be a direct relationship between the size of the school and the average family income--the larger the school, the higher the income. Thirty per cent of the full-time students in schools with enrollments of less than 499 came from families with incomes over \$10,000, and this proportion increased consistently with size of school to 49.0 per cent of the full-time students at schools of more than 10,000. Although part-time students reported a lower overall family income, the relationship between this variable and size of school was parallel to that of full-time students, with 18 per cent of the part-time students at the smallest schools coming from families with incomes over \$10,000, while 33.1 per cent of the part-time students at the largest schools came from such families.

Overall, the large (enrollment over 10,000) suburban junior colleges had full-time students with the highest family income background (59.1 per cent of the parents had incomes over \$10,000) and the small (less than 499) vocational-technical centers outside of the central city had full-time students with the lowest family incomes (only 12 per cent of such families had incomes over \$10,000). In line with this finding, there was also a general relationship between the size of the school and the education of the father: that is, the larger the school, the more educated the father (Table III-18).

Finally, the full-time students at campuses outside the central city appeared to have slightly less educated father's than others. Only 8.5 per cent of the students at campuses outside the central city had fathers with at least a college education, compared to about 14 per cent of fathers of students at central city and suburban schools.

The above findings on the demographic distribution of two-year college students by size and location of schools can be said to sharpen some of the general findings already discussed.

#### Summary of Background Characteristics

The two-year colleges arose out of a need to provide easily accessible low cost education to all who could benefit therefrom. Education is traditionally a means of upward mobility. Although the two-year postsecondary college record, like that of the senior colleges, was somewhat spotty with regard to minority and inner city population, our data indicated that it was a vehicle of upward mobility especially for (1) the white lower middle class; (2) persons from rural and small town backgrounds; (3) persons seeking further education on a part-time basis; (4) females younger than 19 and older than 30, and those who have been widowed, divorced or separated and hence likely to have familial responsibility. Besides its cost advantage over the four-year institution, the two-year institution, due to its local nature in the community, is better able to accommodate part-time students and others who need access to evening classes, particularly those who because of familial responsibilities can pursue further education only on the basis of commuting from home.

### Previous Educational Experience

The overwhelming majority of all respondents were high school graduates. Because of their less restrictive admission policies, one might have expected to find more nongraduates in the vocational-technical center; but even in these schools 74 per cent of the part-time students and 84 per cent of the full-time students had graduated from high school. Thus the type of education sought in two-year colleges would have to be termed primarily post-high school, rather than remedial.

### Major High School Program

There were, however, important differences in the high school majors of the two-year college students by program and type of school. These differences are shown in Table III-19. For both men and women, significantly more full-time students in branch campuses and junior colleges, regardless of whether they were in a certificate or degree program, had taken a college preparatory curriculum in high school.

The most significant finding was that although only one-fourth of the total sample of full-time students had participated in general high school programs, 45 per cent of the men and 33 per cent of the women who were in full-time certificate programs had done so. Of those seeking certificate programs a sex-related vocational bias at the high school level was evident in that 20 per cent of the males and less than 5 per cent of the females had taken vocational-technical training; the proportions were exactly reversed for enrollment in commercial courses. In general, those at the technical institutes and vocational-technical centers

had more varied high school backgrounds than did the others. Whereas more than 80 per cent of full-time enrollees in branch campuses and more than 60 per cent in the junior colleges reported a college preparatory high school major, this was true of only 36 per cent of those in technical institutes and 22 per cent in the vocational-technical centers.

The development of occupational programs in most types of two-year colleges, and especially the establishment of occupationally-oriented institutions, has enabled students not in college preparatory courses to continue their education. Thus besides the low cost factor and the low entrance requirement, the range of curriculum offered in two-year colleges has contributed toward opportunities for post-high school education.

#### High School GPA

On the average, reported high school grade point averages were remarkably consistent across school and program within each sex group. Girls, however, had generally been better students than boys--an almost universal finding of educational research. The only deviation from a C+ norm (77-79 on a numerical scale) for the men was found among the branch campus students for whom the median grade was a B- (82 on a numerical scale). There were two deviations among the women from a B norm (83-86 on a numerical scale). That is, the branch campus female students were most academically able with a numerical median grade of 85.9 or a very high B; women who were taking only course work did not have quite as high a high school average as the other women; their median grade was a B- (median numerical score 81.4), equal to the highest median grade for the men (Table III-20). The median grade for the men was comparable to the ACE freshmen norms for fa-1 1968 based on two-year colleges, the median

for the women was higher than the B- found in that study, and was comparable to the norm for freshmen women in four-year colleges.<sup>11</sup>

One note of caution is necessary. As every college registrar knows, grade point averages are difficult enough to equate across schools, without confounding the issue by trying to compare them across programs. A B average in a general or vocational curriculum is not the same as one in a college preparatory program. The point of our discussion is rather that the typical two-year college student did better than average for his program and his school. Only 28 per cent of the men and 11 per cent of the women were C and D students in high school. This finding supports Adams' research on the relationship of self image to post-high school plans. He found that:

For racial minority and majority students alike, relative assessment of self appears to be as strong a determinant of high school curriculum, in turn the principal objective determinant of post-high school plans and behavior, as is tested ability. Both the student and the student's counselor appear to base self-image and advice as much upon the strength of the classroom competition as upon national test ranking. The net effect is that many able students fail to plan on college and that many students with marginal or even sub-marginal qualifications plan to enter.<sup>12</sup>

#### Evaluation of High School Program

The extent to which each respondent "agreed strongly" with six positively oriented statements about his high school education is shown in Table III-21. The usual overwhelmingly middle-of-the-road stance

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<sup>11</sup>National Norms for Entering College Freshmen (Washington, D.C.: American Council on Education, 1968), pp. 19 and 27.

<sup>12</sup>Walter Adams, "Financial and Non-Financial Factors Affecting Post-High School Plans and Eventuations, 1939-1965." Mimeographed paper presented at the annual meeting of the American Statistical Association, 1969, p. 16.



toward attitude scales was not characteristic of the response pattern on this question. On four of the items, the answers were split almost evenly among the three alternatives listed. On the other two items, pertaining to ideas for careers and adequacy of job counseling, the most common response was negative (46% in the first instance and 76% in the second).

The tendency to evaluate experiences through one's own frame of reference is evident when we compare degree and certificate program enrollees' responses on the item pertaining to adequacy of their vocational training in high school. In each type of school, those in strictly occupational programs would have liked more vocational preparation in high school. However, such differences in evaluations are minimized or disappear when we examine responses to the item pertaining to high school academic programs.

While these students were not completely satisfied with their high schools, there was a comfortable minority (30-40%) of satisfied patrons as far as standard academic courses were concerned. Nevertheless, the guidance department received its usual quota of criticism. The respondents perceived a greater emphasis on academic counseling than job preparation, and even academic counseling was seen as adequate by only 20-30 per cent of the students.

In summary, the American high school is seen essentially as what it is--an academic, subject-oriented institution that does not provide enough emphasis on vocational training for those who are not academically inclined and provides very little career planning advice for anyone.

### College Plans While in High School

The usual phenomenon of high educational aspirations was evident in our respondents' answers to whether or not they had ever considered going to a four-year college during their high school years. Inspection of Table III-22 shows that the majority of the students, regardless of school or program, had at least considered attending a four-year college while in high school. However, the aspirations for a B.A. were higher for students in degree programs than for those in certificate programs; and, for students in junior colleges and branch campuses than those in technical institutes and vocational-technical centers.

More informative than aspirations are actual experiences. We know that 58 per cent of the total sample graduated from high school in either 1967 or 1968. These students probably came directly to the two-year college from high school. Those who graduated earlier could and did try other schools before coming to their present two-year institution. The figure for the sample as a whole was a surprisingly large 30 per cent (see Table III-23). Perhaps even more surprising was the finding that over 40 per cent of the respondents who had attended another school had tried a four-year college. The reasons given for leaving other schools were instructive: only 13 per cent of the males and 11 per cent of the females left for financial reasons; 15 per cent of the men and 9 per cent of the women were dismissed (Table III-24). The major reason for leaving was given as completion by 36 per cent of the full-time and 44 per cent of the part-time students. Of the total sample about 15 per cent had received certificates and 10 per cent some sort of a degree from the previous institutions. Of the part-time students sizable numbers

were teachers taking courses to meet state certification requirements. Some of the full-time students were apparently seeking additional training after already completing one course of study. Strictly personal reasons (marriage, illness, family moves) caused 15 per cent of the men and 29 per cent of the women to leave. Another 13 to 15 per cent left because of change of plans or lack of interest. Thus, if the student reports are accurate, leaving was more often voluntary than forced.<sup>13</sup>

#### Two-Year College Experiences

The question on why the student had actually enrolled in a two-year rather than a four-year college was fruitful one in that the overwhelming reason was given as financial--approximately 40 per cent of both sexes stated that they could not afford a four-year college. Our own unrecognized academic bias had induced us to write the alternative answers in a way that implied that two-year colleges were a second choice at best.<sup>14</sup> Despite the fact that this question came near the end of a long questionnaire, 25-30 per cent of the men and 30-40 per cent of the women wrote in positive reasons for attending two-year colleges. The last three categories of reasons in Table III-25 were all derived from volunteer comments under "other, please specify"<sup>15</sup>--

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<sup>13</sup> In the second phase of the study, a reanalysis of the first phase data will be attempted in addition to the inclusion of new student data to determine the situational and personality correlates of students' flow from one school to another at the postsecondary level.

<sup>14</sup> See Q. 49, Student Questionnaire, Appendix C.

<sup>15</sup> There were 33 per cent male responses and 43 per cent female responses in this write-in group, but one respondent could have given two reasons out of three coded, so the estimated prediction on number of write-in cases is conservative.

"two step process," "four-year college curriculum inappropriate," and "chose two-year college for its own sake"--indicating that a large share of the students were proud of the two-year college as an institution in its own right. To them it was not a junior version of a traditional college. The two-year colleges were performing their function of an interstitial buffer school for at least 10 per cent of their students, making the transition to the four-year college easier. Their occupational programs were valued by students who found the standard college curriculum inappropriate, and a particular school may be chosen for its own sake.

These positive attitudes are also evident in the replies to the question of why a particular two-year college was chosen (Table III-26). Sixty per cent of the certificate students chose their college because of interest in a specific program. Branch campus and junior college degree students were more likely to choose a specific school because it was conveniently located while technical and vocational-technical students were more likely to have selected it because of specific program interest. Less than one-fifth also indicated lack of funds as a major cause of not attending a four-year college.

Granted that there may be some rationalization involved in the answers, nevertheless, the unusually high number of spontaneous responses, particularly regarding preference for a two-year college over a four-year college, indicates that the two-year college is providing services not necessarily found in the traditional institution of higher education.

### Major Field of Study

Major fields of study are shown in Tables III-27 (for men) and III-28 (for women). Although concentrations varied, students in both degree and certificate programs were found in all fields of study. The expected emphasis on liberal arts and sciences was found in the branch campuses and junior colleges, and the concentration in T & I and technical occupations (men) and health occupations (women) was found in the technical institutes and vocational-technical centers. However, the relatively large enrollments in education among full-time students, particularly in the branch centers, came as a surprise. In general, enrollment patterns followed traditional sex related career patterns. The high enrollment in education among full-time students, for instance, was mainly female.

In the case of full-time students taking "courses only," the proportion of students who were undecided about their major field of study was approximately three times the proportion of undecided students among those enrolled in a degree or certificate program. This finding suggests that, at least for these students, the two-year college performed a "cafeteria" function. Yet, for the sample as a whole, most students had chosen a major, following the traditional educational expectation that one should decide his course of study early in his career.

### Future Occupational Goals

Future occupational goals of the students were not completely consistent with their current programs of study (Table III-29 and III-30).

For instance, nearly a quarter of the total group of respondents were taking a liberal arts major, and yet only 10 per cent of the total group indicated a life-goal in one of the traditional professional areas. Similarly, over one-fifth of the students were business majors, yet fewer were planning to make a career of business. In contrast, more students were planning to enter education than those who were currently enrolled in educational courses.<sup>16</sup> Maybe the discrepancy between the program enrollments and career goals highlights the relatively unsatisfactory degree of counseling generally done in two-year colleges (see section on Faculty). In any case, nearly 30 per cent of the male students and one-fifth of the female students were undecided about their future goals. Also one must remember that liberal arts and business are generally the most popular programs offered in two-year colleges; one cannot help but wonder if the student is choosing these curricula or if they choose him. Full-time degree students from both junior colleges and branch campuses had shown little program interest with less than one-fifth having chosen the specific school because of it, compared to more than half of the technical and vocational-technical center students who selected the school because of program interest. There is obviously administrative pressure, even in open-door colleges, to declare a major. It is reasonable to assume that for a student with no specific program interest

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<sup>16</sup>The students who were planning to enter education came from three major fields: Humanities and Arts (28.6 per cent), Social Sciences (34.3 per cent), and Home Economics (25 per cent). It is hoped that the second phase of the study will allow more insight into the relationship between education and actual work experience of these two-year college students.

or no clear idea of his life goals, it may be easier to take the path of least resistance and enroll in the most easily available program than to commit himself to a profession so early in his life--particularly if necessary guidance and counseling are not available.

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#### Rating of School Services

Each student was asked to evaluate his college experience by answering a battery of eleven questions pertaining to instructional and counseling services and the interpersonal atmosphere of the school. The results of this exercise are shown in Table III-31.

All respondents who did not answer the question or who replied that they had no experience with that particular item, or that such services did not exist at their schools, were excluded from the base upon which each per cent was calculated.<sup>17</sup> The proportion rating the item (either excellent, satisfactory, or poor) ranged from a low of 48 per cent for "job placement services" to a high of 98 per cent for "quality of instruction." Aside from intellectual atmosphere, which was rated by 92 per cent of the sample but judged excellent by only 14 per cent, there was a consistent correspondence between a high response rate (90% or more) and a high rating.

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<sup>17</sup>Less than 2 per cent of the total sample reported that the particular services listed did not exist in their schools. About 16 per cent stated they had no experience with academic counseling, and 37 per cent with job counseling. It appears that students enrolled in degree programs or in junior colleges and branch campuses were more likely to have academic counseling than students in certificate programs or in technical institutes and vocational-technical centers, who were more apt to have job counseling.

Both sexes gave higher ratings to interpersonal variables than to specific services, with the important exception that the quality of student participation in school government consistently received the lowest rating of any item in the battery. The apparent contradiction that "quality of instruction" received a rating of excellence three times as often as "intellectual atmosphere" may be explained on this school service-interpersonal dimension. The students may well be responding to teaching methods on the first question and academic rigor on the second. This supposition is supported by the finding that "student-teacher relations" were judged as excellent by 44 per cent in both sex groups.

When we look at the analysis by type of program we find a general tendency for certificate students to react more favorably to their school experiences than do degree students. When the data are examined in terms of student status, we find that both full-time students taking nondegree courses and all part-time students were more critical than their peers. Both of these groups may be less involved with the school: the first through lack of a major, the second precisely because they were part-time. Both were especially critical (in contrast with other students) of academic counseling services. Finally, the students from occupational schools were generally less critical of their schools than junior college and branch campus students.

#### Major Problems

Previous educational research has documented the fact that students tend to blame themselves for their educational failures. This was true of the men in our study, particularly those in the junior



colleges, one-fourth of whom listed their "own poor study habits" as their most important problem. However, this was not so with the women: twice as many women as men state that many of the courses were a waste of time (Table III-32). There were some interesting variations by program and type of school. For instance, more men in certificate programs in occupational schools than in junior colleges were worried over finances. Among women the financial concern was heaviest for those in the branch campuses.

Although the direct worry over finances was relatively low (13 per cent of the men, 7 per cent of the women), considerable stress was caused by jobs that took too much time, particularly among the part-time students. The part-time female student was also harried by trying to juggle school and family obligations. For the total sample, it appears that the finances were not a major source of worry: only 13 per cent of the men and 16 per cent of the women expressed a major concern over their ability to finance their education (Table III-33). But they may be paying too high a price in trying to work and study at the same time. In the next section we shall examine in more detail the financial situation of the two-year college student.

#### Financial Matters

We estimated from the institutional reports on tuition and fees that it could cost a junior college student \$300-350 a year just to meet his school expenses and that the student in an occupational school might be able to manage these expenses for \$250-300 a year. But the student also has to meet living expenses. Median reported total living

expenses are given in Table III-34, and the underlying percentage distribution in Table III-35.

Among full-time students, estimates of total living expenses varied from a low of \$900 a year for women taking a certificate course in a vocational center to a high of \$1,700 for men in branch campus degree programs. With the exception of men in certificate vocational programs, living costs were highest for branch campus students and lowest for those in vocational centers. Part-time junior college students of both sexes, but particularly males, reported median figures that were several hundred dollars higher than those given by full-time students in these same schools.

Differences in life styles may explain this discrepancy. Full-time students were young, and unmarried; 60 per cent of them lived with their parents (Table III-36). The part-time students were older and married; 76 per cent of the men and 67 per cent of the women maintained their own homes. It is very difficult for a young student living at home to estimate his "share" of the cost of keeping up that home. He may or may not pay room and board and if he does, the charges may not be realistic. In the case of those maintaining their own homes, the size of the family will affect living costs, as rent is the largest single budget item to be considered. Splitting the rent two ways between man and wife gives a higher proportion of the total than if it is divided among a family of five. But since we had no data on family size, we could not consider such variables. We also had no way to check the validity of the median expense figures. However, if our estimates of

about \$300 for school expenses are reasonable, the responses given to questions about total living expenses would indicate that the average full-time male student needs about \$1,200, or \$130 a month for the nine month school year for rent, food, clothing, car upkeep, etc. The comparable figure for the females would be about \$900. The fact that the female estimates were so much lower suggests that they may have overlooked household expenses which they were not required to pay. If the male figures were correct, the two-year college students were living very close to the line, and yet expressed surprisingly little concern about their ability to finance their education.

#### Employment

Our respondents were definitely a working population; almost three-fourths of the men and over half of the women were employed. One realizes the poignancy of a complaint that "my job takes too much time" when we see in Table III-37 that 18 per cent of the male full-time degree program students and 25 per cent of the male full-time certificate program students also worked full-time. However, the full-time employment rates for all women were much lower (17.1 per cent) than they were for all men (32.8 per cent). We had expected to find a high rate of full-time employment among part-time students (and we did); but we had not expected to find so many full-time students trying to carry a double load. As a result, the average work week for full-time male students was 26 hours, considerably above that suggested in any work-study program. For all women, the average was 20 hours (the half-time job).

### Types of Work

Another clue as to why the job may be a burden was provided by an analysis of the major kinds of jobs held. As seen in Table III-38 about 40 per cent of the male full-time students were employed as waiters, factory workers, or in other semi-skilled service trades. These were not occupations that they planned as life careers nor were they related to their programs of study. Over half of the women were clerks, secretaries, or salesgirls. While these might be related fields for the business and distributive education majors, they were not for the liberal arts or education majors, the most popular curricula for the women.

Not only was current employment largely unrelated to life goals or course of study, it was also typically in occupations where one could not easily study on the job.

More of the male part-time students were in data processing, engineering, and trades and industry, indicating that their work assignments were more closely related to their studies than was the case for women.

### Earnings

Mean hourly wages revealed the usual wage differences between men and women, with women averaging fifty cents an hour less than men (Table III-39). Male part-time students averaged \$1.50 more than full-time students--who were usually younger--enrolled in comparable junior college programs. The differences for the full-time and part-time female students were only about seventy five cents, attesting to a narrower wage range in business and clerical occupations.

Assuming average pay and working hours, weekly earnings for full-time students can be assumed to range from \$28.00 for females in vocational-technical center programs (26 hours at \$1.07 per hour) to \$65.00 for males in junior college certificate programs (28 hours at \$2.31 per hour). By the same calculation, male part-time junior college students who were taking nondegree courses and averaged the highest hourly rate (\$3.63) would receive average weekly wages of \$150.00.

#### Sources of Funds

Earnings from current jobs were a major source of income for the two-year college student (Table III-40). The other important resource was parents. Only a third of the students reported that they used savings to pay for their education. Aside from husbands' income (for student wives), the other sources listed--relatives, loans, and scholarships--were rarely used by either sex. Altogether 22 per cent of the men and 24 per cent of the women had ever applied for a loan or grant. Among successful grantees, the most frequently tapped source for men were federal loans; women relied almost equally on federal loans and scholarships (both from school and other sources).

The administrators who responded to a similar question had estimated that fewer than 3 per cent of two-year college students were tapping the available sources of financial aid (see Section II, p. 17). The student data showed higher percentages, but, nevertheless, close to 80 per cent of the students were not using any of the loan sources listed.

From the data on hand it is not possible to judge whether the students chose not to go into debt, preferring to work their way through school, whether they did not know where and how to apply, or whether loan money was simply not available.

### Summary

The results indicated that the average full-time student in postsecondary two-year institutions was 20 years old and a recent high school graduate, while his part-time counterpart was six or seven years his senior. The majority of the respondents were white, with less than one in ten belonging to a minority group; the proportion of minority-  
s enrolled part-time was larger than that enrolled full-

two-year college student came essentially from a lower middle-class background and had grown up in a small town or a rural area.

Almost all students in the sample were high school graduates, thus the type of education sought would have to be termed primarily post-high school rather than remedial. More of the students in the branch campuses and junior colleges than in technical institutes and vocational-technical centers had taken college preparatory courses in high school. Thus the latter schools enabled students without a college preparatory background to continue with their education.

On the average, reported high school grade point averages (C+) by sex were consistent across school and program, with the female

students' averages higher than those for the males. The median grade for the males was comparable to the ACE freshmen norms for fall 1968 based on two-year colleges and technical institutes, but the median for the females was comparable to the norm for freshmen women in four-year colleges.

Generally, the student respondent was positive toward his experience in his respective two-year college; part-time students and those taking only courses were more critical than others.

The majority of the students in two-year colleges held part-time jobs, and expected to complete their studies and transfer to a four-year college. The next section describes data obtained from graduates and shows that the expectations of transfer expressed by a majority of two-year college students do come true--providing they, in fact, complete the two-year program.

TABLE III-1

DISTRIBUTION OF 7,673 RESPONDENTS  
BY SEX, STUDENT STATUS, PROGRAM  
AND TYPE OF SCHOOL

	Males	Females
TOTAL	4,625	3,048
FULL-TIME	3,486	2,040
<u>Degree</u>	<u>2,479</u>	<u>1,427</u>
Branch Campus	185	120
Junior College	1,957	1,179
Tech Institute	285	107
Voc-Tech Center	52	21
<u>Certificate</u>	<u>553</u>	<u>373</u>
Branch Campus	2	3
Junior College	210	140
Tech Institute	164	116
Voc-Tech Center	177	114
<u>Courses Only</u>	<u>390</u>	<u>208</u>
Branch Campus	2	2
Junior College	341	179
Tech Institute	16	7
Voc-Tech Center	31	20
PART-TIME	1,071	960
<u>Degree</u>	<u>584</u>	<u>447</u>
Branch Campus	34	59
Junior College	517	383
Tech Institute	27	5
Voc-Tech Center	6	-
<u>Certificate</u>	<u>154</u>	<u>136</u>
Branch Campus	3	8
Junior College	105	107
Tech Institute	23	9
Voc-Tech Center	23	12
<u>Courses Only</u>	<u>307</u>	<u>351</u>
Branch Campus	7	13
Junior College	270	304
Tech Institute	15	12
Voc-Tech Center	15	22



TABLE 111-2  
AGE--1969 STUDENTS  
(In Percentages)

Student Status	N	Males					Females						
		16-19	20-24	25-29	30 or More	Mean	Median	16-19	20-24	25-29	30 or More	Mean	Median
TOTAL	4,257 <sup>a</sup>	38.7	41.3	11.4	8.7	21.70	21.37	48.1	28.1	5.4	18.4	21.95	20.34
FULL-TIME													
Degree	3,378	46.3	43.6	6.6	3.5	20.59	20.42	60.5	27.5	3.1	8.9	20.33	19.31
	2,450	46.2	44.0	6.7	3.1	20.56	20.43	60.6	29.7	2.4	7.2	20.11	19.30
Branch Campus	184	60.9	34.2	4.3	0.5	19.53	19.29	65.5	25.2	1.7	6.7	19.79	19.03
Junior College	1,936	45.7	43.9	7.1	3.3	20.62	20.48	59.1	30.8	2.6	7.4	20.21	19.38
Tech Institute	282	42.2	48.2	5.7	3.9	20.78	20.81	69.2	24.3	0.9	5.4	19.50	18.89
Voc-Tech Center	48	33.3	60.4	4.2	2.1	20.92	21.38	71.4	19.0	4.8	4.8	19.50	18.80
Certificate	547	42.8	43.7	6.8	6.8	21.09	20.83	59.2	19.6	6.2	14.9	21.17	19.40
Junior College	209	42.6	46.9	4.8	5.7	20.90	20.79	59.9	22.6	7.3	10.2	20.69	19.34
Tech Institute	163	41.1	46.0	7.4	5.5	21.07	20.97	66.1	17.4	4.3	12.2	20.46	19.03
Voc-Tech Center	175	44.6	37.7	8.6	9.1	21.34	20.72	50.4	18.6	7.1	23.9	22.47	19.96
Courses Only	381	51.6	41.4	5.5	1.6	20.08	19.87	62.0	26.8	2.0	9.2	20.24	19.23
PART-TIME													
JC Degree	879	9.1	32.2	29.8	28.7	25.94	26.42	16.8	29.6	11.3	42.3	26.04	26.60
JC Certificate	512	9.0	35.5	34.0	21.5	25.44	25.80	14.3	32.1	15.0	38.7	25.98	26.23
JC Courses	101	9.9	25.7	25.7	38.6	26.70	27.79	17.8	29.0	3.7	49.5	26.34	29.38
	266	9.8	28.2	23.3	38.8	26.60	27.58	19.7	26.7	9.3	44.3	26.02	26.96

<sup>a</sup>Base excludes 55 (1.2%) who did not report age.

<sup>b</sup>Base excludes 30 (1.1%) who did not report age.

TABLE III-3

ETHNIC GROUP MEMBERSHIP--1969 STUDENTS  
(In Percentages)

Student Status	N	Males			N	Females		
		Minority	Non-Minority	No Answer		Minority	Non-Minority	No Answer
TOTAL	4,312	7.2	88.8	4.0	2,799	10.6	86.4	3.1
FULL-TIME	3,420	6.7	89.2	4.1	2,005	8.5	88.2	3.3
Degree	<u>2,479</u>	<u>6.7</u>	<u>89.5</u>	<u>3.8</u>	<u>1,427</u>	<u>7.2</u>	<u>89.1</u>	<u>2.9</u>
Branch Campus	185	0.5	96.2	3.2	120	1.7	96.7	1.7
Junior College	1,957	7.8	88.4	3.8	1,179	8.7	88.1	3.1
Tech Institute	285	3.9	93.7	2.5	107	6.5	90.7	2.8
Voc-Tech Center	52	3.8	82.7	13.5	21	4.8	95.2	-
Certificate	<u>551</u>	<u>6.3</u>	<u>89.7</u>	<u>4.0</u>	<u>370</u>	<u>9.7</u>	<u>85.8</u>	<u>4.6</u>
Junior College	210	7.6	90.5	1.9	146	10.7	86.4	2.9
Tech Institute	164	3.0	92.7	4.3	116	6.9	85.3	7.8
Voc-Tech Center	177	7.9	85.9	6.2	114	10.5	86.0	3.5
Courses Only	<u>390</u>	<u>6.7</u>	<u>87.2</u>	<u>6.2</u>	<u>208</u>	<u>10.6</u>	<u>85.6</u>	<u>3.8</u>
PART-TIME	892	9.2	87.0	3.8	794	15.9	81.7	2.4
JC Degree	517	7.5	89.9	2.5	383	18.8	78.9	2.3
JC Certificate	105	12.4	77.1	10.5	107	18.7	80.4	0.9
JC Courses	270	11.1	85.2	3.7	304	11.2	85.9	3.0

TABLE III-4

CURRENT MARITAL STATUS, 1969 STUDENTS  
(In Percentages)

		Male	Female
Full-time (all schools)			
Never married		80.2	82.1
Married		17.6	13.3
Widowed, divorced, separated		1.0	3.2
No answer		1.2	1.4
Total	% N	100.0 (N=3420)	100.0 (N=2005)
Part-time (junior college only)			
Never married		32.0	37.9
Married		63.0	51.8
Widowed, divorced, separated		3.7	9.8
No answer		1.3	0.5
Total	% N	100.0 (N=517)	100.0 (N=383)

TABLE 111-5

CURRENT MARITAL STATUS--1969 STUDENTS  
(In Percentages)

Student Status	N	Males				Females			
		Never Married	Married, No Children	Married, Children	Widowed, Divorced, Separated	Never Married	Married, No Children	Married, Children	Widowed, Divorced, Separated
TOTAL	4,312 <sup>a</sup>	70.2	9.6	17.4	1.6	69.6	5.9	18.4	6.9
FULL-TIME	3,420	80.2	8.2	9.4	1.0	82.1	3.6	9.7	3.2
Degree	2,479	81.5	7.8	8.8	0.7	84.0	3.7	8.2	2.8
Branch Campus	185	89.2	4.9	5.4	-	85.8	5.8	5.8	1.7
Junior College	1,957	81.6	7.6	8.9	0.9	83.6	3.3	8.6	3.2
Tech Institute	285	78.2	10.2	10.5	-	85.0	6.5	6.5	-
Voc-Tech Center	52	69.2	13.5	7.7	-	90.5	-	9.5	-
Certificate	551	72.7	10.7	14.3	1.4	73.5	3.5	16.1	5.6
Junior College	210	76.7	9.0	11.9	1.4	78.6	3.6	9.3	6.4
Tech Institute	164	73.8	9.8	15.2	0.6	77.6	2.6	15.5	3.4
Voc-Tech Center	177	66.7	13.6	16.4	2.3	62.3	4.4	22.4	7.0
Courses Only	390	82.6	7.4	5.9	2.3	84.6	3.4	8.7	1.9
PART-TIME	892	32.0	14.9	48.1	3.7	37.9	11.6	40.2	9.8
JC Degree	517	32.3	15.9	46.8	4.1	38.9	10.2	39.4	11.0
JC Certificate	105	25.7	19.0	49.5	2.9	43.9	9.3	38.3	8.4
JC Courses	270	33.7	11.5	50.0	3.3	34.5	14.1	41.8	8.9

<sup>a</sup> Fifty four (0.3%) did not report their marital status.<sup>b</sup> Thirty (1.1%) did not report their marital status.

TABLE 111-6

TYPE OF COMMUNITY LIVED IN DURING LAST YEAR OF HIGH SCHOOL--1969 STUDENTS  
(In Percentages)

		Males						Females						
Student Status	N	Open Country	Small Town	Medium City	Suburb, Medium City	Large or Very Large City	Suburb of Large City		Open Country	Small Town	Medium City	Suburb, Medium City	Large or Very Large City	Suburb of Large City
TOTAL	4,312 <sup>a</sup>	18.7	17.4	25.0	6.9	16.9	12.8		15.6	15.2	23.9	7.8	19.0	12.5
FULL-TIME	3,420	19.9	18.3	25.7	7.2	14.6	12.3		17.3	19.5	24.2	8.4	16.9	11.8
Degree	2,479	17.7	18.2	26.1	7.9	14.7	13.7		14.4	19.4	24.8	9.3	17.5	12.4
Branch Campus	185	20.5	36.8	31.4	5.4	-	2.7		20.0	34.2	31.7	6.7	1.7	3.3
Junior College	1,957	14.4	15.7	26.1	8.6	17.3	16.2		11.8	17.2	24.6	10.1	19.1	14.0
Tech Institute	285	36.5	22.1	23.2	4.9	7.0	4.9		33.6	26.2	16.8	4.7	11.2	4.7
Voc-Tech Center	52	26.9	23.1	23.1	7.7	7.7	5.8		28.6	23.8	38.1	4.8	4.8	-
Certificate	551	32.0	21.0	25.3	5.6	9.4	4.2		32.2	23.3	20.4	7.0	10.4	5.1
Junior College	210	21.9	19.5	27.1	5.2	15.2	8.6		20.0	21.4	22.1	12.1	11.4	10.7
Tech Institute	164	40.9	26.2	22.6	4.9	2.4	0.6		44.0	25.0	17.2	4.3	6.9	0.9
Voc-Tech Center	177	35.6	18.1	25.4	6.8	9.1	2.3		35.1	24.6	21.1	3.5	12.3	1.8
Courses Only	390	17.4	16.2	23.8	4.6	21.0	14.6		11.1	12.5	26.9	4.3	24.0	19.2
PART-TIME	892	14.1	13.8	22.3	5.9	25.8	15.1		11.5	17.2	23.2	6.3	24.6	14.4
JC Degree	517	12.4	13.3	25.7	5.4	25.1	15.3		9.4	16.7	23.8	7.0	27.2	14.1
JC Certificate	105	12.4	14.3	18.1	12.4	23.8	15.3		7.5	19.6	24.3	7.5	26.1	12.1
JC Courses	270	17.4	14.4	17.4	4.4	27.8	14.8		15.5	16.8	22.0	4.9	20.8	15.5

<sup>a</sup>Ninety five (2.2%) did not report residence.<sup>b</sup>Sixty five (2.3%) did not report residence.

TABLE III-7  
COMPARISON OF SCHOOL LOCATION WITH RESIDENCE DURING LAST YEAR OF HIGH SCHOOL FOR 7,673 STUDENTS  
(In Percentages)

School Location	N	Residence During Last Year of High School			
		Open Country	Small Town	Medium City 10,000-100,000	Large City 100,000+ Suburbs
TOTAL	7,673 <sup>a</sup>	17.9	18.2	24.7	17.2 19.4
Branch Campus	<u>441</u>	<u>22.5</u>	<u>34.0</u>	<u>29.7</u>	<u>1.8</u> 8.8
Central city	248	23.0	25.8	33.9	2.8 12.1
Outside central city	193	22.3	45.1	24.9	0.5 4.7
Junior College	<u>5,791</u>	<u>13.5</u>	<u>16.1</u>	<u>24.7</u>	<u>20.5</u> 22.9
Central city	2,962	11.2	11.4	23.8	29.0 22.5
Suburban	1,817	7.9	18.6	23.5	16.3 31.3
Outside central city	1,012	29.9	26.5	29.2	3.2 9.1
Technical Institute	<u>811</u>	<u>36.6</u>	<u>23.3</u>	<u>22.4</u>	<u>6.9</u> 8.3
Central city	373	28.7	23.9	22.0	11.8 11.0
Outside central city	438	43.4	22.8	22.8	2.7 5.9
Voc-Tech Center	<u>514</u>	<u>34.6</u>	<u>19.3</u>	<u>23.7</u>	<u>11.1</u> 7.8
Central city	191	22.5	11.0	21.5	25.7 14.7
Suburban	323	41.8	24.1	25.1	2.5 3.7

<sup>a</sup>One hundred ninety-two (2.5%) did not give community background data.

TABLE III-8

FATHER'S MAJOR OCCUPATION--1969 STUDENTS  
(In Percentages)

		Males						Females						
Student Status	N	Profes- sional, Managerial	Clerical, Sales	Skilled Trades	Semi- Skilled	Service Worker	Unknown	N	Profes- sional, Managerial	Clerical, Sales	Skilled Trades	Semi- Skilled	Service Worker	Unknown
TOTAL	4,312	30.8	8.6	26.8	22.2	6.4	5.1	2,799	34.3	7.8	25.6	20.3	5.6	6.4
FULL-TIME	3,420	32.0	8.5	26.4	21.9	6.1	5.1	2,005	35.3	7.9	18.2	20.0	5.2	6.3
Degree	2,472	31.6	8.8	26.3	21.8	6.5	5.0	1,427	36.2	7.8	25.1	19.8	5.2	6.5
Branch Campus	185	24.8	5.4	31.4	29.7	5.5	3.2	120	40.1	8.3	23.3	25.0	2.5	0.8
Junior College	1,957	32.6	9.6	25.7	20.7	6.8	4.5	1,179	36.1	7.6	24.8	19.4	5.8	6.3
Tech Institute	285	30.2	6.0	26.0	24.9	5.3	7.8	107	33.7	9.3	28.0	20.6	2.8	5.6
Voc-Tech Center	52	24.9	7.7	30.8	17.3	5.8	13.5	21	33.3	9.5	42.9	9.5	4.8	-
Certificate	551	30.1	7.6	26.2	27.6	4.2	4.7	370	31.6	5.6	26.8	21.5	5.1	9.4
Junior College	210	28.5	8.6	28.1	27.6	2.9	4.3	140	32.1	8.6	29.3	16.4	5.7	7.8
Tech Institute	164	35.4	5.5	24.1	28.1	4.9	3.0	116	33.5	3.4	25.9	20.7	5.2	11.2
Voc-Tech Center	177	27.1	8.5	26.5	27.1	4.0	6.8	114	28.9	4.4	25.5	29.0	4.4	7.9
Courses Only	390	37.2	7.4	27.5	14.1	6.9	7.0	208	36.1	12.0	24.1	17.3	5.2	5.3
PART-TIME	892	26.5	9.2	28.4	23.7	7.3	5.0	794	31.9	7.7	26.2	21.2	6.5	6.5
JC Degree	517	23.3	8.9	28.9	25.8	8.7	4.7	383	31.0	8.6	28.7	19.8	6.5	5.2
JC Certificate	105	25.8	8.6	25.8	27.6	4.8	7.7	107	34.6	6.5	23.3	18.7	8.4	8.4
JC Courses	207	32.9	10.0	28.5	18.1	5.5	4.8	304	31.9	6.9	24.0	23.6	6.0	7.6

TABLE 111-9

FATHER'S EDUCATIONAL ATTAINMENT--1969 STUDENTS  
(In Percentages)

Student Status	N	Males					Females				
		Grade School or Less	Some High School	High School Graduate	Technical Business, Some College	Graduate or Professional Degree	Grade School or Less	Some High School	High School Graduate	Technical Business, Some College	Graduate or Professional Degree
<b>TOTAL</b>	<b>4,312<sup>a</sup></b>	<b>18.7</b>	<b>21.2</b>	<b>26.6</b>	<b>18.8</b>	<b>6.1</b>	<b>19.2</b>	<b>19.0</b>	<b>23.3</b>	<b>20.9</b>	<b>6.3</b>
<b>FULL-TIME</b>	<b>3,420</b>	<b>17.0</b>	<b>21.0</b>	<b>27.3</b>	<b>19.6</b>	<b>6.4</b>	<b>17.2</b>	<b>18.7</b>	<b>24.9</b>	<b>21.1</b>	<b>6.9</b>
Degree	2,479	15.7	20.7	27.7	20.4	6.7	14.9	18.6	25.6	22.2	7.4
Branch Campus	185	16.8	20.5	37.8	14.0	4.9	14.2	12.5	35.8	8.3	8.3
Junior College	1,957	13.4	20.2	27.3	22.3	7.6	13.8	19.1	24.4	23.0	7.1
Tech Institute	285	28.1	23.5	25.3	14.0	2.8	27.1	18.7	27.1	14.0	2.8
Voc-Tech Center	52	26.9	25.0	17.3	13.4	3.8	14.3	28.6	23.8	23.8	9.5
Certificate	551	27.1	23.9	25.1	12.6	3.8	27.6	20.6	23.9	7.2	6.7
Junior College	210	18.6	25.7	27.1	16.6	4.3	18.6	15.7	26.4	7.1	12.9
Tech Institute	164	34.8	20.7	25.6	10.3	3.7	31.9	25.0	19.0	8.6	2.6
Voc-Tech Center	177	29.9	24.9	22.0	10.1	3.4	35.1	21.1	26.3	6.1	3.5
Courses Only	390	11.8	18.7	28.2	23.8	7.7	13.9	15.9	21.6	25.9	8.2
<b>PART-TIME</b>	<b>892</b>	<b>25.2</b>	<b>21.7</b>	<b>24.1</b>	<b>15.6</b>	<b>5.1</b>	<b>24.4</b>	<b>20.0</b>	<b>19.3</b>	<b>20.3</b>	<b>5.0</b>
JC Degree	517	24.4	24.0	24.4	17.3	3.3	25.6	21.1	18.3	21.4	4.4
JC Certificate	105	32.4	19.0	19.0	12.4	3.8	29.0	13.1	17.8	19.7	3.7
JC Courses	270	24.1	18.5	25.6	13.7	8.9	21.7	21.1	21.1	19.1	5.9

<sup>a</sup>One hundred seventy-one (4.0%) did not report father's education.<sup>b</sup>One hundred thirty-eight (4.9%) did not report father's education.



TABLE III-10

MOTHER'S EDUCATIONAL ATTAINMENT--1969 STUDENTS  
(In Percentages)

Student Status	N	Males					Females						
		Grade School or Less	Some High School	High School Graduate	Technical Business, Some College	Graduate or Professional Degree	Grade School or Less	Some High School	High School Graduate	Technical Business, Some College	Graduate or Professional Degree		
TOTAL	4,312 <sup>a</sup>	13.1	19.3	38.8	17.6	5.2	3.1	13.0	19.2	34.9	21.0	5.3	3.5
FULL-TIME	3,420	11.3	19.4	40.0	18.0	5.3	3.4	11.1	17.1	37.7	21.7	5.6	3.7
Degree	2,479	10.6	19.3	40.7	18.4	5.5	3.1	9.1	16.7	38.7	23.3	5.7	3.9
Branch Campus	185	9.7	23.8	44.9	14.6	2.7	2.7	12.5	13.3	45.8	17.5	5.0	4.2
Junior College	1,957	9.0	18.3	41.1	19.8	6.1	3.3	8.2	16.9	37.3	24.9	5.9	4.0
Tech Institute	285	21.4	20.0	39.3	12.0	3.2	1.4	16.8	17.8	41.1	14.0	5.6	2.8
Voc-Tech Center	52	15.4	34.6	19.2	13.5	3.8	3.8	-	19.0	61.9	14.3	4.8	-
Certificate	551	17.2	23.4	36.1	13.1	3.6	3.4	19.7	20.3	35.1	15.4	3.2	2.4
Junior College	210	10.5	22.9	39.5	15.7	3.8	4.8	11.4	18.6	41.4	20.0	2.9	2.1
Tech Institute	164	21.3	23.8	36.6	11.0	3.7	1.8	22.4	22.4	31.9	12.9	3.4	3.4
Voc-Tech Center	177	21.5	23.7	31.6	11.9	3.4	3.4	27.2	20.2	30.7	12.3	3.5	1.8
Courses Only	390	7.7	14.1	41.0	22.6	6.7	5.1	9.6	14.4	35.6	22.1	9.1	5.3
PART-TIME	892	19.6	19.3	34.0	16.0	4.7	2.0	17.9	24.4	27.8	19.3	4.5	2.9
JC Degree	517	20.7	20.1	35.4	15.1	3.5	2.5	18.3	27.2	25.1	18.0	5.5	3.1
JC Certificate	105	16.2	24.8	30.5	13.4	3.8	-	17.8	27.1	26.2	18.6	4.7	1.9
JC Courses	270	18.9	15.6	32.6	18.9	7.4	1.9	17.4	20.1	31.9	21.1	3.3	3.0

<sup>a</sup>One hundred twenty-seven (30%) did not report mother's education.<sup>b</sup>Eighty-four (30%) did not report mother's education.

TABLE III-11  
TOTAL FAMILY INCOME DURING LAST YEAR IN HIGH SCHOOL  
1969 STUDENTS  
(Mean and Median Dollar Figures)

Student Status	Males			Females		
	N	Mean	Median	N	Mean	Median
TOTAL	4,054 <sup>a</sup>	\$9,390	\$8,628	2,586 <sup>b</sup>	\$9,009	\$8,216
FULL-TIME	3,236	9,602	8,836	1,821	9,448	8,653
<u>Degree</u>	<u>2,352</u>	<u>9,718</u>	<u>8,925</u>	<u>1,305</u>	<u>9,702</u>	<u>8,921</u>
Branch Campus	180	8,506	8,078	109	9,477	8,554
Junior College	1,860	9,717	9,015	1,076	9,795	9,050
Tech Institute	267	8,522	8,176	101	9,401	8,544
Voc-Tech Center	45	8,011	6,509	19	7,342	6,833
<u>Certificate</u>	<u>520</u>	<u>8,246</u>	<u>7,617</u>	<u>328</u>	<u>8,183</u>	<u>6,951</u>
Junior College	199	9,520	8,500	121	9,719	8,563
Tech Institute	157	7,363	7,330	103	8,558	6,828
Voc-Tech Center	164	7,546	6,784	104	6,024	5,857
<u>Courses Only</u>	<u>364</u>	<u>10,788</u>	<u>9,969</u>	<u>188</u>	<u>9,891</u>	<u>8,897</u>
PART-TIME	818	8,550	7,743	765	7,962	6,861
JC Degree	486	8,793	7,874	406	8,037	6,798
JC Certificate	88	7,358	7,214	90	6,878	6,143
JC Courses	244	8,495	7,714	269	8,211	7,194

<sup>a</sup>Base excludes 258 (6.0%) who did not report family income.

<sup>b</sup>Base excludes 213 (7.6%) who did not report family income.

TABLE 111-12  
TOTAL FAMILY INCOME DURING LAST YEAR IN HIGH SCHOOL--1969 STUDENTS  
(In Percentages)

Males										Females								
Student Status	N	Income						Mean	Median	N	Income						Mean	Median
		\$3,000 or Less	\$3,000-\$4,999	\$5,000-\$6,999	\$7,000-\$9,999	\$10,000-\$14,999	\$15,000 or More				\$3,000 or Less	\$3,000-\$4,999	\$5,000-\$6,999	\$7,000-\$9,999	\$10,000-\$14,999	\$15,000 or More		
TOTAL	4,054 <sup>a</sup>	6.0	10.1	16.2	28.1	24.5	12.6	\$9,390	\$8,628	2,586 <sup>b</sup>	9.0	12.1	19.1	24.1	22.6	13.0	\$9,009	\$8,216
FULL-TIME	3,236	5.3	9.6	17.6	28.5	25.9	13.1	9,602	8,836	1,821	7.0	10.4	18.0	26.3	24.3	13.9	9,448	8,653
Degree	2,352	4.3	9.4	17.7	29.1	26.4	13.2	9,718	8,925	1,305	5.6	10.5	16.8	26.7	26.0	14.4	9,702	8,921
Branch Campus	180	3.3	9.4	24.4	35.6	22.2	5.0	8,506	8,078	109	3.7	11.9	21.1	25.7	23.9	13.8	9,477	8,554
Junior College	1,860	4.2	8.4	16.8	28.2	27.5	14.9	9,717	9,015	1,076	5.8	10.1	16.3	26.1	27.1	14.6	9,795	9,050
Tech Institute	267	3.7	15.4	18.0	33.0	22.8	8.1	8,522	8,176	101	5.9	11.9	14.9	33.7	18.8	14.9	9,401	8,544
Voc-Tech Center	45	11.1	15.6	24.4	17.8	22.8	8.9	8,011	6,509	19	5.3	15.8	31.6	31.6	10.5	5.3	7,342	6,833
Certificate	520	10.5	11.7	22.2	27.0	19.7	8.8	8,246	7,617	328	13.2	12.1	24.8	19.3	18.7	11.2	8,183	6,951
Junior College	199	5.0	5.0	26.1	27.6	24.1	12.0	9,520	8,500	121	5.0	9.1	25.6	19.8	24.8	15.7	9,719	8,563
Tech Institute	157	14.6	15.3	16.6	31.8	15.9	5.8	7,363	7,330	103	14.6	9.7	28.2	14.6	18.4	2.9	8,558	6,828
Voc-Tech Center	164	13.4	16.5	22.6	22.0	17.7	7.9	7,546	6,784	104	23.1	18.3	20.2	23.1	12.5	-	6,024	5,857
Courses Only	364	4.7	7.7	11.0	26.9	31.0	18.6	10,788	9,969	188	5.3	6.9	14.9	36.2	21.8	14.9	9,891	8,897
PART-TIME	818	8.7	12.0	22.7	26.7	19.2	10.8	8,550	7,743	765	13.7	16.1	21.7	18.8	18.7	11.0	7,962	6,881
JC Degree	486	7.6	10.7	24.1	26.1	20.0	11.5	8,793	7,874	406	12.3	18.0	21.9	18.0	17.5	12.3	8,037	6,798
JC Certificate	88	11.4	17.0	19.3	31.8	14.8	5.6	7,358	7,214	90	24.4	16.7	15.6	18.9	16.7	7.8	6,878	6,143
JC Courses	244	9.8	12.7	21.3	25.8	19.3	11.0	8,495	7,714	269	12.2	13.0	23.3	20.0	21.1	10.4	8,211	7,194

<sup>a</sup>Base excludes 258 (6.0%) who did not report family income.

<sup>b</sup>Base excludes 213 (7.6%) who did not report family income.

TABLE III-13  
SEX BY SIZE AND LOCATION OF SCHOOL--1969 STUDENTS  
(In Percentages)

	N	Male	Female
TOTAL	7,673	60.3	39.7
FULL-TIME	5,526	63.1	36.9
<u>Location</u>			
Central city	2,557	63.3	36.7
Suburb	1,439	58.1	41.9
Outside central city	1,530	67.4	32.6
<u>Size of School</u>			
10,000 and over	859	59.8	40.2
5,000-9,999	742	59.7	40.3
2,500-4,999	1,364	61.7	38.3
1,000-2,499	1,367	65.8	34.2
500-999	672	69.3	30.7
499 and less	522	61.7	38.3
PART-TIME	2,031	52.7	47.3
<u>Location</u>			
Central city	1,217	53.9	46.1
Suburb	571	50.1	49.9
Outside central city	243	53.1	46.9
<u>Size of School</u>			
10,000 and over	552	53.4	46.6
5,000-9,999	296	53.4	46.6
2,500-4,999	462	50.6	49.4
1,000-2,499	393	52.4	47.6
500-999	235	58.7	41.3
499 and less	93	43.0	57.0

TABLE III-14  
AGE BY SIZE AND LOCATION OF SCHOOL--1969 STUDENTS  
(In Percentages)

	N	17 and Younger	18-19	20-24	25-29	30 and Older
TOTAL <sup>a</sup>	7,581	0.9	40.2	35.7	9.5	13.7
FULL-TIME	5,461	0.7	50.8	37.5	5.3	5.5
<u>Location</u>						
Central city	2,536	0.7	47.0	39.2	6.6	6.5
Suburb	1,427	1.1	55.3	35.0	4.1	4.5
Outside central city	1,498	0.5	52.9	37.1	4.4	5.1
<u>Size of School</u>						
10,000 and over	851	0.9	46.9	40.4	6.0	5.8
5,000-9,999	734	1.1	50.1	37.3	5.8	5.7
2,500-4,999	1,350	0.9	50.2	36.7	6.0	6.2
1,000-2,499	1,347	0.4	49.9	39.7	4.6	5.4
500-999	664	1.1	53.2	36.3	4.4	5.0
499 and less	515	0.2	58.8	31.5	5.0	4.5
PART-TIME	2,008	1.4	11.9	30.4	20.8	35.6
<u>Location</u>						
Central city	1,204	1.7	11.2	31.1	21.9	34.1
Suburb	562	0.3	12.3	31.7	18.7	37.0
Outside central city	242	2.5	14.0	23.5	19.8	40.2
<u>Size of School</u>						
10,000 and over	542	1.8	9.8	29.9	23.4	35.1
5,000-9,999	294	1.7	12.6	35.7	19.4	30.6
2,500-4,999	458	1.1	12.9	30.1	18.8	37.1
1,000-2,499	389	1.0	12.8	30.1	21.1	35.0
500-999	233	1.3	11.2	21.0	22.7	43.8
499 and less	92	2.2	14.1	27.2	13.0	43.5

<sup>a</sup>Base excludes 92 (1.2%) who did not report age.

TABLE III-15  
ETHNIC GROUP MEMBERSHIP BY SIZE AND LOCATION  
OF SCHOOL--1969 STUDENTS  
(In Percentages)

	N	Minority <sup>b</sup>	Blacks Only	Non- minority
TOTAL <sup>a</sup>	7,385	8.8	5.1	91.2
FULL-TIME	5,311	7.7	4.3	92.3
<u>Location</u>				
Central city	2,482	8.4	7.0	91.6
Suburb	1,381	6.1	3.1	93.9
Outside central city	1,448	5.7	4.3	94.3
<u>Size of School</u>				
10,000 and over	831	11.7	4.7	88.3
5,000-9,999	716	14.5	6.8	85.5
2,500-4,999	1,318	6.1	3.4	93.9
1,000-2,499	1,313	4.7	3.3	95.3
500-999	642	3.9	3.4	96.1
499 and less	491	8.3	6.1	91.7
PART-TIME	1,963	11.6	7.0	88.4
<u>Location</u>				
Central city	1,180	14.1	8.5	85.9
Suburb	549	8.7	5.6	91.3
Outside central city	234	5.1	3.0	94.9
<u>Size of School</u>				
10,000 and over	535	13.4	6.0	86.6
5,000-9,999	286	24.8	17.8	75.2
2,500-4,999	445	10.3	6.1	89.7
1,000-2,499	381	5.2	3.4	94.8
500-999	227	5.3	4.8	94.7
499 and less	89	6.7	4.5	93.3

<sup>a</sup>Base excludes 288 (3.9%) who did not report ethnicity.

<sup>b</sup>Includes Blacks as well as other minority groups.

TABLE III-16

MARITAL STATUS BY SIZE AND LOCATION OF SCHOOL--1969 STUDENTS  
(In Percentages)

	N	Never Married	Married, No Children	Married, Children	Other
TOTAL <sup>a</sup>	7,580	69.0	8.4	19.5	3.0
FULL-TIME	5,455	81.9	6.6	9.7	1.8
<u>Location</u>					
Central city	2,534	79.5	7.0	11.1	2.3
Suburb	1,424	87.1	5.1	5.9	1.9
Outside central city	1,497	80.8	7.4	10.7	1.1
<u>Size of School</u>					
10,000 and over	850	84.1	5.1	8.3	2.5
5,000-9,999	733	80.2	8.7	8.3	2.8
2,500-4,999	1,349	81.6	4.9	11.4	2.1
1,000-2,499	1,345	82.1	6.9	9.5	1.5
500-999	662	82.2	7.8	8.7	1.3
499 and less	516	80.2	8.3	10.6	0.8
PART-TIME	2,013	34.8	13.1	46.0	6.1
<u>Location</u>					
Central city	1,209	35.0	13.9	44.9	6.2
Suburb	563	36.0	12.2	45.1	6.7
Outside central city	241	29.5	8.3	53.5	8.7
<u>Size of School</u>					
10,000 and over	546	34.6	15.2	44.1	6.1
5,000-9,999	294	44.5	12.9	34.3	8.2
2,500-4,999	458	31.7	14.0	47.6	6.8
1,000-2,499	390	33.1	12.6	51.0	3.3
500-999	232	31.5	10.3	51.7	6.5
499 and less	93	35.5	5.4	50.5	8.6

<sup>a</sup>Base excludes 93 (1.2%) who did not report marital status.

TABLE 111-17

TOTAL FAMILY INCOME DURING LAST YEAR IN HIGH SCHOOL  
BY SIZE AND LOCATION OF SCHOOL--1969 STUDENTS  
(In Percentages)

	N	Less Than 3,000	3,000- 4,999	5,000- 6,999	7,000- 9,999	10,000- 14,999	15,000 or More
TOTAL <sup>a</sup>	7,086	7.5	11.1	18.9	26.7	23.3	12.4
FULL-TIME	5,148	6.0	9.9	17.8	27.8	25.3	13.3
<u>Location</u>							
Central city	2,382	5.4	8.6	16.2	28.5	26.5	14.7
Suburb	1,359	2.9	7.2	17.1	27.1	30.2	15.5
Outside central city	1,407	9.8	14.8	21.0	27.1	18.3	8.8
<u>Size of School</u>							
10,000 and over	801	4.2	6.1	14.2	26.3	26.3	22.7
5,000-9,999	695	4.3	8.5	12.5	27.2	32.2	15.2
2,500-4,999	1,268	3.7	9.1	16.8	31.0	27.0	12.4
1,000-2,499	1,268	7.8	10.0	19.1	28.2	23.4	11.4
500-999	631	8.4	14.4	21.9	26.0	20.9	8.2
499 and less	485	9.1	14.6	24.9	23.5	19.2	8.7
PART-TIME	1,841	11.5	14.2	22.2	23.3	18.5	10.3
<u>Location</u>							
Central city	1,106	11.9	14.8	21.5	23.5	18.4	9.8
Suburb	515	9.7	11.8	23.2	22.3	21.0	12.3
Outside central city	220	13.6	16.8	25.0	24.1	13.2	7.3
<u>Size of School</u>							
10,000 and over	487	10.3	12.7	19.7	24.2	21.8	11.3
5,000-9,999	276	12.7	14.5	21.7	15.9	21.4	13.8
2,500-4,999	428	10.0	12.8	24.3	24.3	19.2	9.3
1,000-2,499	359	11.7	19.2	20.9	27.9	16.4	10.3
500-999	208	12.5	19.2	28.4	21.1	13.9	4.8
499 and less	83	19.3	22.9	16.9	22.9	7.2	10.8

<sup>a</sup>Base excludes 585 (8.2%) who did not report father's income.



TABLE III-18

FATHER'S EDUCATION BY SIZE AND LOCATION OF SCHOOL--1969 STUDENTS  
(In Percentages)

	N	11th Grade or Less	High School Graduate	Post High School, Technical School, Some College	College Degree	Graduate Degree
TOTAL <sup>a</sup>	7,328	41.9	26.3	20.1	6.2	5.4
FULL-TIME	5,305	39.0	27.3	20.9	6.8	5.9
<u>Location</u>						
Central city	2,460	36.6	26.9	22.4	7.2	6.9
Suburb	1,392	33.3	27.9	24.2	8.5	6.1
Outside central city	1,453	48.5	27.7	15.3	4.4	4.1
<u>Size of School</u>						
10,000 and over	830	32.0	26.6	24.3	8.5	8.4
5,000-9,999	715	34.8	25.5	25.0	8.4	6.3
2,500-4,999	1,297	35.6	27.6	23.4	6.9	6.5
1,000-2,499	1,316	41.2	26.8	20.8	5.7	4.9
500-999	644	47.7	30.7	13.2	4.5	3.9
499 and less	503	48.5	27.6	13.3	5.8	4.8
PART-TIME	1,918	49.6	23.5	18.0	4.8	4.1
<u>Location</u>						
Central city	1,154	50.7	22.4	17.3	5.2	4.4
Suburb	531	43.7	24.7	21.7	5.6	4.3
Outside central city	233	57.5	25.7	13.3	1.7	1.7
<u>Size of School</u>						
10,000 and over	512	43.2	22.4	19.9	8.0	6.4
5,000-9,999	286	54.5	20.6	19.6	1.4	3.8
2,500-4,999	432	47.7	25.0	17.8	5.6	3.9
1,000-2,499	380	47.9	24.7	19.5	4.5	3.4
500-999	225	60.4	25.3	11.1	2.2	0.9
499 and less	83	60.2	20.5	14.5	2.4	2.4

<sup>a</sup>Base excludes 345 (4.7%) who did not report father's education.

TABLE III-19

MAJOR PROGRAM IN HIGH SCHOOL--1969 STUDENTS  
(In Percentages)

Student Status	Males				N	Females			
	College Preparatory	General	Business, Commercial	Vocational, Technical		College Preparatory	General	Business, Commercial	Vocational, Technical
TOTAL	52.5	30.8	4.9	8.5	4,312 <sup>a</sup>	57.6	20.7	17.3	1.6
FULL-TIME	54.9	29.5	4.7	8.1	2,005	59.6	59.6	15.3	1.7
Degree	61.1	25.7	5.0	5.8	1,427	66.2	16.4	14.0	1.3
Branch Campus	86.5	5.9	3.2	1.6	120	89.2	2.5	5.8	0.8
Junior College	61.8	25.6	5.2	4.9	1,179	65.6	17.6	13.5	1.3
Tech Institute	47.7	35.1	4.6	10.9	107	50.5	18.7	25.2	1.9
Voc-Tech Center	17.3	48.1	3.8	25.0	21	47.6	14.3	33.3	4.8
Certificate	26.9	44.8	4.3	19.7	370	37.3	33.0	22.5	3.2
Junior College	38.1	35.7	5.7	16.2	140	47.1	27.9	20.7	0.7
Tech Institute	17.7	51.8	2.4	24.4	116	31.9	32.6	25.9	6.0
Voc-Tech Center	22.0	49.2	4.5	19.8	114	29.8	39.5	21.9	3.5
Courses Only	54.6	32.1	3.3	6.4	208	54.3	30.3	10.6	1.9
PART-TIME	43.5	35.8	5.8	9.9	794	52.6	20.0	22.4	1.4
JC Degree	43.1	37.9	5.6	9.7	383	55.4	18.5	20.9	1.6
JC Certificate	30.5	40.0	8.6	16.2	107	43.0	22.4	29.0	1.9
JC Courses	49.3	30.0	5.2	7.8	304	52.6	21.1	22.0	1.0

<sup>a</sup>One hundred forty three (3.3%) did not report high school program. <sup>b</sup>Seventy seven (2.8%) did not report high school program.

TABLE 111-20  
HIGH SCHOOL GRADE POINT AVERAGE--1969 STUDENTS  
(In Percentages)

Student Status	N	Males							N	Females							
		Grades <sup>a</sup>								Grades <sup>c</sup>							
		A	B+	B	B-	C+	C	D		A	B+	B	B-	C+	C	D	
TOTAL	4,219 <sup>b</sup>	3.6	7.3	15.2	17.9	28.3	24.9	2.6	2,739 <sup>d</sup>	13.6	18.0	22.1	17.4	18.2	10.2	0.5	
FULL-TIME																	
Degree	2,435	3.6	8.1	16.7	18.3	27.1	24.2	2.0	1,403	12.5	18.2	23.8	18.2	17.5	9.6	0.4	
Branch Campus	181	9.4	13.3	21.0	21.5	22.7	10.5	1.7	118	23.7	21.2	32.2	12.7	5.9	4.2	-	
Junior College	1,925	3.4	7.5	15.6	17.5	27.0	26.9	2.2	1,160	11.7	17.6	23.1	18.8	18.3	10.1	0.4	
Tech Institute	280	1.8	8.9	20.0	22.1	30.0	16.1	1.1	104	9.6	22.1	20.2	16.3	22.1	9.6	-	
Voc-Tech Center	49	-	8.2	24.5	16.3	30.6	18.4	2.0	21	4.8	14.3	33.3	22.8	14.3	9.5	-	
Certificate	535	2.2	5.2	12.7	20.3	30.5	25.2	3.2	362	12.6	17.0	23.3	18.4	15.6	12.3	0.8	
Junior College	204	2.0	4.4	8.3	20.1	32.4	29.4	3.4	136	11.8	11.8	21.3	15.4	18.4	20.6	0.7	
Tech Institute	160	2.5	5.6	14.4	19.4	26.9	28.1	3.1	114	12.2	15.8	32.5	17.5	13.2	7.9	0.9	
Voc-Tech Center	171	2.4	5.3	16.4	21.6	32.2	19.3	2.9	112	14.2	25.0	16.1	22.3	14.3	7.1	0.9	
Courses Only	381	2.6	7.5	13.7	12.5	33.7	26.3	3.3	205	7.8	17.1	17.1	22.4	21.5	13.2	1.0	
PART-TIME																	
JC Degree	868	5.0	6.4	13.8	16.9	28.6	25.9	3.3	769	17.7	18.5	19.6	14.3	20.0	9.5	0.4	
JC Certificate	503	4.6	5.2	13.5	15.9	30.6	27.2	3.0	376	20.0	17.3	18.6	12.8	19.7	11.2	0.5	
JC Courses	107	1.0	6.9	15.7	25.5	22.5	26.5	2.0	103	15.5	15.5	22.3	20.4	21.4	4.9	-	
	258	7.3	8.9	14.0	15.9	27.5	23.6	2.7	290	15.5	21.0	20.0	14.1	20.0	9.0	0.3	

<sup>a</sup>The median grade for all groups was C+, except the full-time branch campus degree program where it was B-.

<sup>c</sup>The median grade for all groups was a B, except the full-time junior college certificate and nondegree courses where it was B-.

<sup>b</sup>Base excludes 83 (1.9%) who did not report high school GPA.

<sup>d</sup>Base excludes 60 (2.1%) who did not report high school GPA.

TABLE 111-21  
EXTENT OF POSITIVE EVALUATION OF HIGH SCHOOL EDUCATION--1969 STUDENTS  
(In Percentages)<sup>a</sup>

Student Status	N	Males					Females				
		Gave Me New Ideas About Types of Work	Enough Emphasis on Vocational Subjects	Enough Emphasis on Academic Subjects	Enough Emphasis on Work Experience	Adequate Educational Counseling	Gave Me New Ideas About Types of Work	Enough Emphasis on Vocational Subjects	Enough Emphasis on Academic Subjects	Enough Emphasis on Work Experience	Adequate Educational Counseling
TOTAL	4,312	11.9	32.7	30.8	27.6	20.9	14.2	33.6	37.9	30.9	22.7
FULL-TIME	3,420	12.5	33.1	31.8	28.0	22.2	14.8	34.1	40.0	31.5	25.4
Degree	2,479	12.2	37.0	31.8	29.1	22.0	14.4	38.5	40.4	33.2	24.9
Branch Campus	185	10.3	37.8	31.4	25.9	16.8	12.5	36.7	41.7	24.1	20.8
Junior College	1,957	13.0	39.8	31.8	30.8	21.3	14.2	40.7	39.4	35.3	24.8
Tech Institute	285	14.4	21.1	33.3	22.1	27.7	16.8	18.7	48.6	22.4	26.2
Voc-Tech Center	52	13.5	14.5	25.0	15.4	32.7	23.8	28.6	42.9	23.8	47.6
Certificate	551	11.8	15.6	31.2	22.3	22.7	15.9	16.5	35.1	25.7	29.2
Junior College	210	12.4	27.6	37.6	27.6	23.8	12.1	19.3	33.6	27.9	24.3
Tech Institute	164	9.1	4.9	29.3	14.6	20.7	18.2	16.4	43.1	28.4	39.7
Voc-Tech Center	177	13.6	11.3	27.7	23.2	23.1	19.3	13.2	35.1	20.2	24.6
Courses Only	320	10.3	24.5	31.5	29.0	22.6	15.4	35.1	29.8	29.8	22.1
PART-TIME	892	9.6	31.1	26.9	26.3	16.1	12.7	32.2	35.6	29.6	15.7
JC Degree	517	8.9	30.6	41.2	26.1	17.2	11.2	36.2	32.4	34.2	14.1
JC Certificate	105	7.6	19.1	28.6	16.2	13.3	10.3	28.0	42.1	25.2	15.9
JC Courses	270	11.9	11.9	31.5	30.7	1.8	15.5	29.9	37.5	25.3	17.8

<sup>a</sup>Table does not present the complete distribution of answers. Only the per cent who "agreed strongly" with the positive form of the statement is shown.

TABLE III-22

CONSIDERATION OF FOUR-YEAR COLLEGE WHILE IN HIGH SCHOOL--1969 STUDENTS  
(In Percentages)

Student Status	Males				N	Females		
	Yes	No	NA	Yes		No	NA	
TOTAL	4,312	77.2	22.1	0.6	2,799	76.5	23.0	0.5
FULL-TIME	3,420	79.6	19.8	0.6	2,005	77.4	22.2	0.4
Degree	2,479	83.1	16.5	0.4	1,427	81.4	18.3	0.4
Branch Campus	185	91.9	7.6	0.5	120	85.0	15.0	-
Junior College	1,957	83.5	16.1	0.4	1,179	81.6	18.1	0.3
Tech Institute	285	78.6	20.7	0.7	107	75.7	23.4	0.9
Voc-Tech Center	52	61.5	36.5	1.9	21	76.2	23.8	-
Certificate	551	62.0	36.5	1.5	370	61.1	38.4	0.8
Junior College	210	66.2	33.3	0.5	140	68.6	31.4	-
Tech Institute	164	54.3	44.5	1.5	116	57.8	41.4	0.9
Voc-Tech Center	177	64.4	32.8	2.8	114	54.4	43.9	1.8
Courses Only	390	82.1	17.4	0.5	208	79.3	20.7	-
PART-TIME	892	68.3	36.5	0.6	794	74.2	24.8	1.0
JC Degree	517	67.5	32.3	0.2	383	77.8	20.9	1.3
JC Certificate	105	67.6	30.5	1.9	107	75.7	24.3	-
JC Courses	270	70.0	29.3	0.7	304	69.1	29.9	1.0

TABLE 111-23

ATTENDANCE AT OTHER POSTSECONDARY SCHOOLS--1969 STUDENTS  
(In Percentages)

Student Status	Males				Females			
	N	Major Types of Schools <sup>a</sup>			N	Major Types of Schools <sup>a</sup>		
		None	One or More	N		None	One or More	N
<b>TOTAL</b>	4,312	69.3	30.8	1,312 <sup>b</sup>	2,799	70.6	29.4	816 <sup>b</sup>
<b>FULL-TIME</b>	3,420	75.6	24.8	830	2,005	79.1	20.9	415
<b>Degree</b>	2,479	75.3	24.7	611	1,427	79.2	20.2	283
Branch Campus	185	87.6	14.2	23	120	86.7	13.3	16
Junior College	1,957	73.8	26.2	511	1,179	78.7	21.3	249
Tech Institute	285	76.4	23.6	67	107	86.0	14.0	15
Voc-Tech Center	52	80.8	19.2	10	21	81.0	19.0	3
<b>Certificate</b>	551	79.4	20.6	113	370	78.8	21.2	78
Junior College	210	83.3	16.7	34	140	77.1	22.9	32
Tech Institute	164	79.3	20.7	34	116	81.9	18.1	21
Voc-Tech Center	177	74.6	25.5	45	114	78.1	21.9	25
<b>Courses Only</b>	390	72.6	27.4	106	205	74.0	26.0	54
<b>PART-TIME</b>	892	45.4	54.6	482	794	49.1	50.9	401
JC Degree	517	46.0	53.9	277	383	48.8	51.2	195
JC Certificate	105	52.4	47.6	50	107	55.1	44.9	47
JC Courses	270	41.5	58.5	155	304	47.4	52.6	159

<sup>a</sup>Some 15% of the males had received some training in the military; only 4% of the females reported attending a proprietary business school.

<sup>b</sup>Base includes only those who attended another postsecondary school aside from the one in which they are currently enrolled.

TABLE III-24

REASONS FOR LEAVING OTHER POSTSECONDARY SCHOOLS--1969 STUDENTS  
(In Percentages)

Student Status	N	Males					N	Females						
		Personal	Financial	Military Service	Comple- tion	Dismissal		Change of Plans, Loss of Interest	Personal	Financial	Military Service	Comple- tion	Dismissal	Change of Plans, Loss of Interest
TOTAL	1,148 <sup>a</sup>	14.8	12.7	8.4	36.0	15.1	13.1	720 <sup>b</sup>	28.8	11.2	0.8	35.7	8.6	14.9
FULL-TIME	736	15.4	13.0	7.6	30.0	19.0	14.9	373	28.4	11.3	1.3	29.8	11.8	17.4
Degree	547	15.0	13.3	7.3	31.3	18.5	14.6	256	28.6	10.6	0.8	31.4	11.0	17.6
Branch Campus	21	4.8	28.6	-	33.3	9.5	21.8	16	37.5	12.5	-	37.5	6.2	6.2
Junior College	452	16.2	12.6	7.5	32.1	17.7	13.9	223	29.1	11.2	0.9	31.8	9.4	17.5
Tech Institute	64	9.4	15.6	7.8	25.0	25.0	17.2	13	15.4	-	-	7.7	38.5	38.5
Voc-Tech Center	10	20.0	-	10.0	30.0	30.0	10.0	3	-	-	-	66.7	33.3	-
Certificate	93	19.4	12.9	6.5	28.0	18.3	15.0	68	30.4	13.0	1.4	27.5	10.1	17.3
Junior College	26	23.1	3.8	7.7	38.5	11.5	15.4	27	29.6	7.4	-	33.3	11.1	18.5
Tech Institute	29	17.2	17.2	3.4	34.5	17.2	10.3	19	26.3	15.8	-	15.8	15.8	26.4
Voc-Tech Center	38	18.4	15.8	7.9	15.8	23.7	18.4	22	36.4	18.2	4.5	27.3	4.5	4.5
Courses Only	96	13.5	11.5	10.4	25.0	22.9	16.7	49	24.5	12.2	4.1	26.5	18.4	14.3
PART-TIME	412	13.8	12.1	9.7	46.6	8.0	9.7	347	29.1	11.2	0.3	42.1	5.2	12.1
JC Degree	246	15.0	13.4	11.8	42.7	7.7	9.4	173	34.1	8.7	0.6	39.3	4.6	12.7
JC Certificate	36	16.7	11.1	13.9	50.0	2.8	5.6	39	23.1	15.4	-	38.5	15.4	7.7
JC Courses	130	10.8	10.0	4.6	53.1	10.0	11.5	135	24.4	13.3	-	46.7	3.0	12.6

<sup>a</sup>Base excludes 164 (12.5%) who did not report why they left the other postsecondary school.<sup>b</sup>Base excludes 96 (11.8%) who did not report why they left the other postsecondary school.

TABLE 111-25  
REASONS FOR ATTENDING TWO-YEAR RATHER THAN FOUR-YEAR COLLEGE--1969 STUDENTS  
(In Percentages)

Student Status	N	Males									Females								
		Did Enroll in 4-Year, But Left	Test Scores Not Good Enough	High School Grades Not Good Enough	On Waiting List at 4-Year; Enrolled at 2-Year	Could Not Afford 4-Year School	Personal Reasons	Two Step Process	Four-year College Curriculum Inappropriate	Chose 2-Year College For Its Own Sake	Did Enroll in 4-Year, But Left	Test Scores Not Good Enough	High School Grades Not Good Enough	On Waiting List at 4-Year; Enrolled at 2-Year	Could Not Afford 4-Year School	Personal Reasons	Two Step Process	Four-year College Curriculum Inappropriate	Chose 2-Year College For Its Own Sake
TOTAL	4,152 <sup>a</sup>	13.3	13.7	22.5	2.5	39.6	8.3	10.2	7.3	15.2	12.0	11.8	13.7	3.0	41.9	6.3	10.3	10.7	22.0
FULL-TIME	3,291	11.6	14.6	22.5	2.8	40.5	7.6	11.1	7.4	15.2	10.2	13.2	14.7	1.8	43.0	8.6	11.1	11.8	18.9
Degree	2,418	10.7	15.1	21.6	3.0	41.6	7.5	12.0	6.8	15.3	9.0	14.0	15.0	1.9	43.3	9.3	12.6	10.7	18.6
Branch Campus	171	5.3	13.5	12.3	5.3	32.2	5.3	39.8	2.3	9.9	5.3	4.4	2.6	3.5	34.2	6.1	39.5	3.5	14.9
Junior College	1,924	10.6	16.0	23.3	3.2	42.4	8.3	10.9	6.1	14.9	9.4	14.8	16.0	1.7	44.6	10.1	11.1	10.8	18.2
Tech Institute	278	13.7	12.2	17.3	0.7	42.8	4.0	4.7	14.0	19.8	8.9	15.8	15.8	2.0	41.6	5.0	2.0	14.9	25.7
Voc-Tech Center	45	20.0	-	13.3	2.2	35.6	6.7	-	8.9	26.7	10.5	15.8	21.1	-	26.3	5.3	-	21.1	31.6
Certificate	491	12.8	12.0	21.7	1.8	36.0	7.3	5.9	13.2	17.7	12.6	8.7	12.9	0.9	42.0	5.7	4.2	18.9	19.8
Junior College	206	7.3	20.9	31.6	3.4	36.9	8.7	11.2	7.3	13.1	8.9	16.3	17.8	-	37.0	8.9	8.1	23.0	17.0
Tech Institute	144	13.2	6.2	13.2	-	38.9	6.9	2.1	18.1	24.3	13.9	5.6	9.3	2.8	38.0	3.7	0.9	18.5	25.9
Voc-Tech Center	141	20.6	5.0	16.3	1.4	31.2	5.7	2.1	17.0	17.7	16.1	1.1	9.2	-	55.2	3.4	2.3	13.8	16.1
Courses Only	382	15.7	14.9	29.1	2.4	39.8	8.4	12.3	3.7	13.9	14.3	14.8	16.3	3.0	42.4	7.9	11.8	7.9	19.2
PART-TIME	861	19.9	10.2	22.3	1.5	36.1	11.1	6.7	7.1	14.2	16.6	8.3	11.1	0.7	39.1	13.8	8.2	7.9	29.9
JC Degree	507	19.0	11.8	22.7	1.6	41.6	8.3	8.5	5.5	11.2	17.4	10.7	12.8	0.7	39.6	12.9	9.6	5.6	17.3
JC Certificate	100	17.0	3.0	19.0	2.0	36.0	13.0	1.0	8.0	17.0	15.4	8.7	13.5	1.0	44.2	6.7	1.9	14.4	17.3
JC Courses	254	18.1	9.8	22.8	1.2	25.2	16.1	5.5	9.8	18.9	16.2	5.2	7.9	0.3	36.8	14.8	8.6	8.6	18.6

<sup>a</sup>Base excludes 160 (3.9%) who did not answer Q. 49. Percentages can add to more than 100% because of multiple answers.

<sup>b</sup>Base excludes 101 (3.6%) who did not answer Q. 49. Percentages can add to more than 100% because of multiple answers.



TABLE 111-26  
REASONS FOR ATTENDING SPECIFIC TWO-YEAR SCHOOL--1969 STUDENTS  
(In Percentages)

Student Status	Males						Females					
	N	Convenient Location	Interested in Specific Program	Easier Entrance Requirements	Can't Afford 4-Year College	Other	N	Convenient Location	Interested in Specific Program	Easier Entrance Requirements	Can't Afford 4-Year College	Other
TOTAL	4,312	39.8	28.2	9.8	15.8	6.4	2,799	39.5	28.4	6.4	18.0	7.9
FULL-TIME	3,420	36.7	28.3	10.6	17.3	7.1	2,005	33.7	31.2	6.5	19.5	9.1
Degree	2,479	39.2	23.6	10.8	19.0	7.2	1,427	36.8	24.7	7.2	21.1	10.1
Branch Campus	185	54.1	17.3	7.0	14.6	7.0	120	55.0	12.5	6.7	15.0	10.8
Junior College	1,957	42.0	18.1	12.4	19.7	7.9	1,179	37.4	21.0	7.9	23.0	10.7
Tech Institute	285	15.1	58.6	4.2	17.5	4.7	107	14.0	70.1	0.9	10.3	4.6
Voc-Tech Center	52	15.4	63.5	1.9	13.5	5.8	21	14.3	71.4	9.5	4.8	-
Certificate	551	22.6	59.2	4.5	8.7	4.9	370	19.8	62.7	2.4	12.1	2.9
Junior College	210	32.4	41.9	11.0	8.1	6.7	140	30.0	51.4	5.7	10.0	2.8
Tech Institute	164	15.2	72.6	-	10.4	1.8	116	8.6	73.3	-	14.7	3.5
Voc-Tech Center	177	17.5	68.4	1.1	7.3	5.7	114	17.5	66.7	0.9	12.3	2.7
Courses Only	390	40.2	14.1	17.9	19.0	8.7	208	37.5	19.2	8.7	21.2	13.5
PART-TIME	892	51.9	27.6	6.5	10.3	3.7	794	54.2	21.4	5.9	13.6	4.9
JC Degree	517	53.8	23.8	6.4	12.4	3.7	383	55.6	13.3	7.0	19.6	4.5
JC Certificate	105	41.0	42.9	1.9	9.5	4.9	107	47.7	35.5	6.5	9.3	0.9
JC Courses	207	52.6	28.9	8.5	6.7	3.4	304	54.6	26.6	4.3	7.6	6.8

TABLE 111-27  
MAJOR FIELD OF STUDY IN TWO-YEAR COLLEGE--1969 MALE STUDENTS  
(In Percentages)

Student Status	N	Liberal Arts, Sciences	Business, Sales	Technical Occupations	Engineering	Trade, Industrial Occupations	Education	Protective Services	Agriculture	Health Occupations	Undecided
<b>TOTAL</b>	<b>4,312</b>	<b>22.2</b>	<b>21.2</b>	<b>12.4</b>	<b>12.0</b>	<b>9.9</b>	<b>4.7</b>	<b>3.8</b>	<b>2.6</b>	<b>1.2</b>	<b>9.7</b>
<b>FULL-TIME</b>	<b>3,420</b>	<b>22.9</b>	<b>20.1</b>	<b>12.7</b>	<b>11.8</b>	<b>10.7</b>	<b>4.9</b>	<b>2.8</b>	<b>3.0</b>	<b>1.3</b>	<b>9.5</b>
<u>Degree</u>	<u>2,479</u>	<u>25.3</u>	<u>22.7</u>	<u>12.7</u>	<u>12.8</u>	<u>4.1</u>	<u>5.9</u>	<u>3.1</u>	<u>2.8</u>	<u>1.5</u>	<u>9.0</u>
Branch Campus	185	24.4	22.1	7.6	16.2	0.5	17.3	1.1	2.2	0.5	8.1
Junior College	1,957	29.5	22.9	9.7	11.0	2.7	5.8	3.7	2.5	1.4	10.7
Tech Institute	285	1.1	22.8	35.4	20.0	10.9	0.4	1.1	6.4	2.1	-
Voc-Tech Center	52	-	17.3	21.2	28.8	30.8	-	-	-	1.9	-
<u>Certificate</u>	<u>551</u>	<u>8.3</u>	<u>11.4</u>	<u>19.1</u>	<u>8.3</u>	<u>42.4</u>	<u>0.4</u>	<u>1.6</u>	<u>3.2</u>	<u>1.1</u>	<u>3.8</u>
Junior College	210	19.5	17.6	12.9	8.6	25.7	1.0	2.4	1.9	2.4	8.1
Tech Institute	164	3.0	6.7	22.6	3.7	53.7	-	1.2	7.9	-	1.2
Voc-Tech Center	177	-	8.5	23.2	12.4	52.0	-	1.1	0.6	0.6	1.1
<u>Courses Only</u>	<u>390</u>	<u>28.7</u>	<u>15.9</u>	<u>3.6</u>	<u>10.3</u>	<u>8.2</u>	<u>5.1</u>	<u>2.6</u>	<u>3.8</u>	<u>1.0</u>	<u>20.5</u>
<b>PART-TIME</b>	<b>892</b>	<b>19.4</b>	<b>25.4</b>	<b>11.2</b>	<b>13.0</b>	<b>7.0</b>	<b>3.9</b>	<b>7.4</b>	<b>0.9</b>	<b>0.6</b>	<b>10.5</b>
JC Degree	517	20.0	31.2	10.1	14.9	2.5	4.8	8.3	0.8	0.8	7.9
JC Certificate	105	10.5	22.9	21.0	11.4	19.0	2.9	6.7	1.9	-	3.8
JC Courses	270	24.4	15.5	9.6	10.0	10.7	2.6	5.9	0.7	0.4	18.1

TABLE III-28  
MAJOR FIELD OF STUDY IN TWO-YEAR COLLEGE--1969 FEMALE STUDENTS  
(In Percentages)

Student Status	N	Liberal Arts, Sciences	Education	Health Occupations	Office, Secretarial Occupations	Business, Sales	Technical Occupations	Home Economics	Engineering, Trade, Industrial, Occupations, Protective Services	Undecided
TOTAL	2,799	25.0	18.8	15.8	12.0	10.1	4.2	3.1	2.1	8.6
FULL-TIME	2,005	23.5	19.5	18.1	13.6	9.1	4.3	3.2	2.2	6.2
Degree	1,427	27.5	23.5	13.8	10.7	9.5	4.1	3.2	1.7	5.2
Branch Campus	120	27.5	51.7	5.0	0.8	6.7	-	1.7	-	6.7
Junior College	1,179	29.4	23.1	13.5	10.5	7.6	3.4	3.3	2.0	6.3
Tech Institute	107	1.9	0.9	29.0	25.2	23.3	13.1	2.8	1.8	1.9
Voc-Tech Center	21	-	-	9.5	4.8	61.9	19.0	4.8	-	-
Certificate	370	27.5	4.3	38.9	25.7	10.8	7.3	2.4	4.2	1.3
Junior College	140	10.7	11.4	35.7	20.7	8.6	4.3	1.4	4.3	2.9
Tech Institute	116	0.9	-	48.3	24.1	9.5	10.3	2.6	4.3	-
Voc-Tech Center	114	0.9	-	33.3	33.3	14.9	7.9	3.5	4.4	0.9
Courses Only	208	29.3	19.7	10.1	12.0	3.4	1.0	4.8	2.5	17.3
PART-TIME	794	28.8	16.9	9.9	8.3	12.5	3.8	2.8	1.7	14.6
JC Degree	383	33.9	21.7	11.2	4.2	11.2	3.4	2.4	0.8	11.2
JC Certificate	107	15.9	15.9	15.0	14.0	18.7	7.5	2.8	3.7	6.5
JC Courses	304	27.1	11.2	6.6	11.2	11.8	3.0	3.3	2.3	21.7

TABLE 111-29  
FUTURE OCCUPATIONAL GOALS 1--1969 MALE STUDENTS  
(In Percentages)

Student Status	N	Business, Sales, Data Processing	Engineering, Engineering Technology	Liberal Arts, Sciences	Education	Trade, Industrial Occupations	Protective Services	Agriculture, Food Trades	Health Occupations	Other	Undecided
TOTAL	4,312	14.6	14.1	10.5	8.4	8.3	2.8	2.4	2.3	2.8	28.9
FULL-TIME	3,420	13.1	13.9	10.7	9.1	8.8	1.8	2.7	2.5	2.2	30.3
Degree	2,479	14.4	13.7	11.5	10.3	4.7	2.0	2.6	2.7	2.3	20.4
Branch Campus	185	11.9	12.4	11.9	16.2	1.6	2.7	2.7	1.1	1.6	31.9
Junior College	1,957	13.7	11.5	13.0	11.3	4.0	2.4	2.3	3.1	2.4	31.1
Tech Institute	285	20.4	26.3	2.8	0.7	9.5	-	4.2	1.4	2.4	26.3
Voc-Tech Center	52	17.3	30.8	1.9	1.9	17.3	-	3.8	1.9	-	23.1
Certificate	551	9.1	17.8	5.3	1.8	26.4	0.4	3.1	0.9	1.8	28.1
Junior College	210	9.5	12.4	8.6	3.8	18.1	1.0	2.8	2.4	3.8	31.4
Tech Institute	164	6.1	17.7	3.6	0.6	31.7	-	5.5	-	1.2	30.5
Voc-Tech Center	177	11.3	24.3	2.8	0.6	31.1	-	1.1	-	-	22.5
Courses Only	390	10.5	9.5	13.6	11.8	9.8	1.8	3.1	3.3	1.8	32.3
PART-TIME	892	20.3	14.8	10.0	5.8	7.1	6.8	1.3	1.7	4.9	24.1
JC Degree	517	21.8	14.5	11.0	4.4	5.4	8.5	0.8	1.2	6.0	25.0
JC Certificate	105	20.0	15.2	1.0	6.6	15.2	6.7	1.0	1.0	-	25.7
JC Courses	270	17.4	15.2	11.5	8.1	7.0	3.7	2.6	3.0	4.8	21.8

TABLE 111-30

FUTURE OCCUPATIONAL GOALS 11--1969 FEMALE STUDENTS  
(In Percentages)

Student Status	N	Education	Business, Sales, Office, Secretarial Occupations	Health Occupations	Liberal Arts, Sciences	Home Economics, Food Trades	Engineering, Trade, Industrial Occupations, Protective Services	Other	Undecided
<b>TOTAL</b>	<b>2,799</b>	<b>23.0</b>	<b>18.5</b>	<b>15.1</b>	<b>10.5</b>	<b>1.2</b>	<b>2.1</b>	<b>9.5</b>	<b>20.5</b>
<b>FULL-TIME</b>	<b>2,005</b>	<b>23.6</b>	<b>19.1</b>	<b>16.8</b>	<b>10.4</b>	<b>1.2</b>	<b>2.4</b>	<b>8.2</b>	<b>18.8</b>
<u>Degree</u>	<u>1,427</u>	<u>29.1</u>	<u>18.1</u>	<u>13.5</u>	<u>11.4</u>	<u>1.4</u>	<u>2.1</u>	<u>7.5</u>	<u>18.1</u>
Branch Campus	120	47.5	6.7	7.5	15.8	0.8	2.3	5.0	15.0
Junior College	1,179	30.2	15.4	13.1	11.8	1.4	1.9	7.6	18.7
Tech Institute	107	1.9	37.4	25.2	4.7	2.8	3.7	8.4	15.9
Voc-Tech Center	21	-	66.7	9.5	-	-	4.8	9.5	9.5
<u>Certificate</u>	<u>370</u>	<u>3.8</u>	<u>28.4</u>	<u>32.4</u>	<u>3.5</u>	<u>0.8</u>	<u>4.3</u>	<u>10.3</u>	<u>16.5</u>
Junior College	140	10.0	22.1	32.1	6.4	0.7	2.8	7.8	17.8
Tech Institute	116	-	29.3	40.5	1.7	1.7	4.3	6.9	15.5
Voc-Tech Center	114	-	35.1	24.6	1.8	-	6.1	16.7	15.8
<u>Courses Only</u>	<u>208</u>	<u>21.6</u>	<u>10.6</u>	<u>11.0</u>	<u>15.4</u>	<u>0.5</u>	<u>3.4</u>	<u>9.6</u>	<u>27.2</u>
<b>PART-TIME</b>	<b>794</b>	<b>21.5</b>	<b>17.9</b>	<b>11.1</b>	<b>9.9</b>	<b>1.1</b>	<b>0.8</b>	<b>14.9</b>	<b>24.7</b>
JC Degree	383	29.2	12.5	12.3	11.2	0.8	0.3	9.9	23.8
JC Certificate	107	15.9	27.1	13.1	6.5	2.8	2.7	7.5	24.3
JC Courses	304	13.8	21.4	8.9	9.5	1.0	0.9	18.4	26.0

TABLE 111-31  
RATING OF TWO-YEAR COLLEGE--1969 STUDENTS  
(Per cent rating item as excellent)

Student Status	Males											Females										
	Quality of Instruction	Academic Counseling	Job or Career Counseling	Student Participation in School Governance	Student Activities	Congentiality of Students	Job Placement Service	Intellectual Atmosphere	School Reputation	Availability of Teachers	Student-teacher Relations	Quality of Instruction	Academic Counseling	Job or Career Counseling	Student Participation in School Governance	Student Activities	Congentiality of Students	Job Placement Service	Intellectual Atmosphere	School Reputation	Availability of Teachers	Student-teacher Relations
TOTAL <sup>a</sup>	37.1	20.8	22.9	11.3	19.0	26.6	29.6	14.8	42.0	41.2	44.6	38.0	24.3	25.4	13.3	18.0	30.9	30.7	13.5	39.7	42.4	44.0
FULL-TIME	38.4	21.4	23.6	11.4	18.9	26.8	30.3	14.8	43.0	42.7	45.8	38.5	24.5	26.1	13.4	16.8	31.3	30.8	12.7	41.0	43.1	45.2
Degree	37.9	21.1	21.5	11.2	19.8	26.7	29.2	13.6	42.1	44.3	46.4	37.9	23.8	23.9	11.9	17.8	32.4	30.7	11.5	39.7	43.8	45.2
Branch Campus	30.1	14.0	16.4	6.8	10.1	37.6	28.3	13.2	39.4	46.0	46.4	31.6	19.8	20.5	7.5	8.3	45.6	29.4	17.2	40.2	37.1	42.7
Junior College	37.2	20.4	18.6	11.3	21.9	24.4	25.8	12.7	40.8	44.3	45.0	38.9	24.4	23.5	11.7	18.3	30.7	30.0	11.0	39.0	44.9	44.8
Tech Institute	47.9	30.1	39.0	12.6	12.9	33.6	52.1	18.8	51.4	44.7	56.4	34.3	21.5	29.5	17.0	21.3	32.7	34.7	11.3	44.2	36.5	48.1
Voc-Tech Center	38.0	22.7	21.3	20.0	15.4	33.3	17.1	22.2	47.9	35.7	43.7	35.0	20.0	25.0	25.0	29.4	50.0	42.9	10.0	52.6	61.1	65.0
Certificate	42.3	26.1	32.6	12.9	16.4	29.4	36.2	20.9	54.0	38.0	49.7	42.5	32.2	37.6	14.6	15.1	29.0	32.3	15.7	47.8	40.8	47.9
Junior College	36.5	21.6	28.0	8.8	21.0	24.6	31.8	12.5	43.9	37.9	44.1	36.8	27.5	29.2	10.9	15.5	24.6	27.3	12.2	42.2	39.7	49.1
Tech Institute	46.0	23.7	34.6	14.5	18.3	32.2	47.0	27.9	67.7	41.8	55.3	43.9	29.3	37.9	18.3	18.2	23.1	41.2	12.3	48.2	36.1	47.8
Voc-Tech Center	45.6	33.9	35.9	17.5	5.4	32.0	29.7	24.1	53.1	34.1	51.5	49.5	43.2	47.5	15.9	11.8	41.0	27.9	23.8	55.6	48.2	49.5
Courses Only	35.4	17.9	21.6	9.9	15.7	24.5	21.4	13.9	34.1	38.6	43.5	35.5	16.9	20.0	11.7	11.3	27.1	28.0	15.5	38.0	42.1	40.4
PART-TIME	32.2	17.4	18.9	10.8	19.4	25.3	24.0	15.0	37.4	33.8	36.6	36.9	19.9	19.7	16.8	23.8	29.7	29.9	15.7	36.0	40.0	40.8
JC Degree	32.7	19.0	19.7	7.2	19.8	25.4	21.4	13.8	35.9	35.2	37.6	37.7	23.7	19.9	14.4	20.0	28.5	32.4	14.2	32.5	44.6	43.6
JC Certificate	35.0	16.4	22.7	23.5	15.0	26.5	31.0	22.2	44.3	32.4	36.8	35.6	28.2	36.0	21.1	33.3	38.4	27.0	22.9	43.4	45.8	46.9
JC Courses	30.4	12.7	14.1	15.8	20.2	24.6	27.6	14.8	37.8	31.2	34.6	36.3	21.2	18.7	18.8	26.1	28.0	27.4	14.9	37.8	30.2	34.8

<sup>a</sup>All no answers, "have no experience with that," and "does not exist" answers were excluded from the base on which each per cent was calculated; therefore the number of respondents varies for each item. The percentage rating the item (excellent, satisfactory, or poor) ranges from 48 per cent for job placement to 98 per cent for quality of instruction.

TABLE 111-32

MAJOR PROBLEMS INTERFERING WITH EDUCATIONAL ACHIEVEMENT--1969 STUDENTS  
(In Percentages)<sup>a</sup>

		Males							Females						
Student Status	N	Inadequate High School Preparation	Job Takes Too Much Time	Worry Over Finances	Poor Study Habits	Many Courses Waste of Time	School Doesn't Offer Course I Want	N	Inadequate High School Preparation	Job Takes Too Much Time	Worry Over Finances	Poor Study Habits	Many Courses Waste of Time	School Doesn't Offer Course I Want	Family Obligations
TOTAL	3,374 <sup>b</sup>	12.0 <sup>c</sup>	15.1	13.1	24.7	9.3	5.7	2,240 <sup>c</sup>	9.3	10.9	6.9	11.6	20.1	10.8	12.4
FULL-TIME															
Degree															
Branch Campus	142	9.9	8.5	10.6	19.0	15.5	15.5	103	14.6	8.7	15.5	7.8	14.6	12.6	7.8
Junior College	1,576	12.8	10.8	13.5	29.3	10.5	4.8	957	10.6	7.8	6.4	11.9	23.6	13.3	8.4
Tech Institute	226	11.9	10.6	16.8	28.3	6.6	3.5	85	7.1	2.4	3.5	16.5	17.6	22.4	5.9
Voc-Tech Center	34	11.8	26.5	14.7	20.6	2.9	8.8	15	-	-	-	20.0	33.3	20.0	6.7
Certificate	403	12.6	14.8	20.0	18.3	10.9	2.2	292	9.8	4.7	4.1	13.6	22.4	11.5	11.2
Junior College	166	18.1	13.3	12.7	24.1	12.0	2.4	112	11.6	5.4	4.5	8.0	20.5	9.8	13.4
Tech Institute	116	11.2	13.8	24.1	16.4	14.7	1.7	96	8.3	5.2	2.1	16.7	26.0	16.7	8.3
Voc-Tech Center	121	6.6	17.4	26.4	11.6	5.8	2.5	84	9.5	3.6	4.8	17.9	20.2	8.3	11.9
Courses Only	320	10.0	12.2	12.2	26.6	8.4	8.1	180	6.7	7.2	12.8	11.7	27.2	11.1	6.1
PART-TIME															
JC Degree	673	11.0	29.4	7.9	17.1	5.9	7.3	608	7.4	21.5	6.6	10.0	12.3	4.4	22.9
JC Certificate	414	11.4	30.2	9.7	16.7	5.3	6.8	317	7.9	22.1	4.1	13.9	9.8	4.1	24.0
JC Courses	70	15.7	14.3	2.9	18.6	5.7	5.7	75	6.7	13.3	8.0	6.7	20.0	6.7	20.0
	189	8.5	25.9	5.8	17.5	7.4	9.0	216	6.9	23.6	9.7	5.1	13.4	4.2	22.2

<sup>a</sup>Only problems listed as "the most important problem" by 10% or more of the respondents (both sexes combined) are shown.<sup>b</sup>Base excludes 938 (21.8%) who did not specify a single most important problem.<sup>c</sup>Base excludes 559 (20%) who did not specify a single most important problem.

TABLE III-33  
DEGREE OF CONCERN OVER ABILITY TO FINANCE EDUCATION--1969 STUDENTS  
(In Percentages)

Student Status	N	Males				N	Females			
		Major Concern	Some Concern	None	No Answer		Major Concern	Some Concern	None	No Answer
<b>TOTAL</b>	4,312	13.4	45.6	37.7	3.4	2,799	15.7	40.8	38.8	4.7
<b>FULL-TIME</b>	3,420	13.9	48.4	34.3	3.4	2,005	14.8	44.3	37.0	3.9
<u>Degree</u>	2,479	14.8	50.0	33.4	1.7	1,427	16.3	47.5	34.2	2.0
Branch Campus	185	14.6	57.3	28.1	-	120	17.5	51.7	30.0	0.8
Junior College	1,957	15.9	51.2	31.5	1.4	1,179	17.4	48.3	32.5	1.9
Tech Institute	285	8.4	41.4	46.7	3.5	107	4.7	41.1	50.5	3.7
Voc-Tech Center	52	9.6	26.9	53.8	9.6	21	4.8	14.3	71.4	9.5
<u>Certificate</u>	551	9.2	38.9	39.6	11.6	370	5.2	32.2	50.1	11.8
Junior College	210	11.4	48.1	36.7	3.8	140	8.6	37.1	49.3	5.0
Tech Institute	164	6.7	32.9	50.6	9.8	116	0.9	26.7	62.9	9.5
Voc-Tech Center	177	11.3	32.8	33.3	22.6	114	7.9	29.8	39.5	22.8
<u>Courses Only</u>	390	13.6	51.8	31.8	2.8	208	20.2	44.7	32.7	2.4
<b>PART-TIME</b>	892	11.2	34.8	50.8	3.2	794	18.1	32.1	43.1	6.7
JC Degree	517	12.4	41.0	44.9	1.7	383	21.9	38.6	35.2	4.2
JC Certificate	105	8.6	29.5	55.2	6.7	107	15.9	26.2	55.1	2.8
JC Courses	270	10.0	24.8	60.4	4.8	304	14.1	26.0	48.7	11.2



TABLE III-34

ESTIMATED MEDIAN TOTAL LIVING EXPENSES--1969 STUDENTS

Student Status	Males		Females	
	N	Median	N	Median
TOTAL	3,933	\$1,560	2,403	\$1,248
FULL-TIME	3,217	\$1,483	1,813	\$1,202
<u>Degree</u>	<u>2,343</u>	<u>1,532</u>	<u>1,287</u>	<u>1,263</u>
Branch Campus	181	1,688	110	1,562
Junior College	1,845	1,539	1,063	1,245
Technical Institute	268	1,437	98	1,204
Voc-Tech Center	49	1,232	16	778
<u>Certificate</u>	<u>512</u>	<u>1,406</u>	<u>338</u>	<u>996</u>
Junior College	198	1,539	128	1,114
Technical Institute	154	1,267	109	1,007
Voc-Tech Center	160	1,389	101	884
<u>Courses Only</u>	<u>362</u>	<u>1,350</u>	<u>188</u>	<u>1,127</u>
PART-TIME	716	\$2,271	590	\$1,456
JC Degree	435	2,389	302	1,625
JC Certificate	83	2,167	84	1,333
JC Courses	198	2,030	204	1,316

TABLE 111-35

ESTIMATED TOTAL LIVING EXPENSES DURING SCHOOL YEAR (1968-69)  
(In Percentages)

		Males							Females						
Student Status	N	Less Than \$499	\$500-\$999	\$1,000-\$1,499	\$1,500-\$1,999	\$2,000-\$2,999	\$3,000 or More	N	Less Than \$499	\$500-\$999	\$1,000-\$1,499	\$1,500-\$1,999	\$2,000-\$2,999	\$3,000 or More	
TOTAL	3,933 <sup>a</sup>	9.4	15.4	23.1	16.6	18.6	16.8	2,403 <sup>b</sup>	12.4	24.6	26.0	14.0	13.8	9.1	
FULL-TIME	3,217	8.7	17.1	25.0	18.1	18.7	12.4	1,813	11.1	27.5	28.3	14.9	11.8	6.4	
Degree	2,343	7.7	16.9	24.2	19.0	19.5	12.8	1,287	9.6	25.3	28.8	15.9	14.3	6.2	
Branch Campus	181	3.9	12.7	24.3	24.3	25.4	9.4	110	1.8	16.4	28.2	29.1	22.7	1.8	
Junior College	1,845	7.7	16.5	24.2	18.9	19.0	13.6	1,063	10.0	25.6	29.4	14.4	13.6	6.9	
Tech Institute	268	9.0	20.5	23.5	17.2	19.0	10.8	98	12.2	26.5	27.6	16.3	13.3	4.1	
Voc-Tech Center	49	12.3	24.5	28.6	10.2	18.4	6.1	16	18.7	56.2	-	18.7	6.2	-	
Certificate	512	12.1	16.1	26.8	16.1	16.9	11.8	338	14.1	36.1	27.0	10.6	5.9	6.5	
Junior College	198	7.6	12.1	28.8	19.2	19.2	13.1	128	11.7	32.0	27.3	13.3	7.0	8.5	
Tech Institute	154	12.3	22.1	29.2	9.1	16.2	11.0	109	12.8	36.7	32.1	9.2	4.6	4.6	
Voc-Tech Center	160	17.5	15.0	22.5	19.4	15.0	10.6	101	18.8	40.6	20.8	8.9	5.9	5.0	
Courses Only	362	10.7	19.9	27.6	14.9	16.3	10.5	188	16.0	27.1	27.1	16.5	5.3	8.0	
PART-TIME	716	12.7	8.2	14.1	10.0	18.0	36.9	590	16.6	15.9	19.2	11.2	19.8	17.3	
JC Degree	435	11.7	6.4	13.8	10.8	18.6	38.6	302	14.9	12.9	18.9	13.2	20.5	19.5	
JC Certificate	83	18.0	13.3	12.0	3.6	18.1	34.9	84	20.3	15.5	21.4	8.3	17.9	16.7	
JC Courses	198	12.7	10.1	15.7	11.1	16.7	33.6	204	17.6	20.6	18.6	9.3	19.6	14.2	

<sup>a</sup>Base excludes 379 (8.9%) who did not estimate expenses.<sup>b</sup>Base excludes 396 (14.1%) who did not estimate expenses.

TABLE 1111-36

PLACE OF RESIDENCE--1969 STUDENTS  
(In Percentages)

Student Status	N	Males				Females			
		Own Home Apartment	Parents	School Housing	Other <sup>a</sup>	Own Home Apartment	Parents	School Housing	Other <sup>b</sup>
<b>TOTAL</b>	4,312	41.4	50.6	6.0	2.0	37.1	53.8	6.3	2.8
<b>FULL-TIME</b>	3,420	32.5	58.0	7.5	2.1	25.4	63.4	8.4	2.8
<u>Degree</u>	2,472	30.8	59.2	8.1	2.0	21.0	66.6	9.3	3.0
Branch Campus	185	26.5	60.0	11.9	1.6	21.7	65.0	9.2	4.2
Junior College	1,957	30.9	60.4	6.9	1.9	20.6	68.4	7.9	3.2
Tech Institute	285	32.3	50.2	14.7	2.8	27.1	44.9	27.1	0.9
Voc-Tech Center	52	34.6	59.6	1.9	3.8	9.5	90.5	-	-
<u>Certificate</u>	551	42.0	48.5	6.1	3.3	43.0	47.6	6.5	3.0
Junior College	210	36.2	47.1	9.0	7.6	28.6	53.6	14.3	3.6
Tech Institute	164	46.3	46.3	7.2	-	53.4	48.8	3.4	4.3
Voc-Tech Center	177	45.2	52.0	1.7	1.1	50.0	49.1	-	0.9
<u>Courses Only</u>	390	29.7	63.6	5.4	1.3	24.0	68.7	5.3	2.0
<b>PART-TIME</b>	892	75.8	22.4	0.2	1.6	66.8	29.7	0.8	2.6
JC Degree	517	74.9	23.8	0.2	1.2	66.6	29.5	0.8	3.2
JC Certificate	105	80.0	20.0	-	-	61.7	33.6	2.8	1.9
JC Courses	270	75.9	20.7	0.4	3.0	68.7	28.6	0.3	2.3

<sup>a</sup>Nine NA's (0.2%) included in other.<sup>b</sup>Seven NA's (0.3%) included in other.

TABLE III-37

CURRENT EMPLOYMENT STATUS--1969 STUDENTS  
(In Percentages)

Student Status	Male			Female		
	N	Employed Full-Time	Employed Part-Time	Not Employed	Employed Full-Time	Employed Part-Time
TOTAL	4,312 <sup>a</sup>	32.8	38.5	28.0	17.1	38.3
						43.6
FULL-TIME						
Degree	3,420	19.1	46.3	33.9	4.9	45.3
						48.9
Branch Campus	2,479	17.8	47.6	33.8	4.5	48.8
						46.0
Junior College	185	9.2	42.2	48.1	5.0	46.7
Technical Institute	1,957	19.0	47.4	32.8	4.7	50.1
Voc-Tech Center	285	13.7	53.7	32.3	2.8	37.4
	52	28.8	40.4	30.8	-	42.9
						52.4
Certificate	551	24.8	36.3	38.3	4.6	34.6
						59.5
Junior College	210	24.3	38.6	36.2	3.6	44.3
Technical Institute	164	29.9	36.0	33.5	4.3	33.6
Voc-Tech Center	177	20.3	33.9	45.8	0.1	21.9
						69.3
Courses Only	390	19.5	52.1	27.4	8.7	41.3
						48.6
PART-TIME						
	892	85.1	8.9	6.4	48.0	20.6
						30.2
JC Degree	517	85.9	8.9	4.4	47.3	20.4
JC Certificate	105	85.7	7.6	5.7	43.9	26.2
JC Courses	270	83.3	9.3	7.4	50.3	19.1
						28.9

<sup>a</sup>Thirty (0.7%) did not report employment status.<sup>b</sup>Twenty seven (1.0%) did not report employment status.

TABLE III-38

MAJOR TYPES OF JOBS HELD BY 1969 STUDENTS  
(In Percentages)

Student Status	N	Males				Females			
		Business, Sales	Data Processing	Foods, Service Semi- Skilled	Engineering and Industry	Trade and Industry	Business, Sales	Office, Secretarial, Data Processing	Health Service
<b>TOTAL</b>	<b>3,006<sup>a</sup></b>	<b>17.5</b>	<b>9.3</b>	<b>38.9</b>	<b>8.1</b>	<b>13.3</b>	<b>22.2</b>	<b>37.6</b>	<b>11.9</b>
<b>FULL-TIME</b>	<b>2,181</b>	<b>18.3</b>	<b>7.7</b>	<b>47.7</b>	<b>4.8</b>	<b>11.8</b>	<b>23.7</b>	<b>34.5</b>	<b>11.0</b>
Degree	1,580	20.0	8.0	43.4	4.4	9.9	24.8	36.1	9.7
Branch Campus	94	24.5	7.5	39.3	5.3	6.4	25.0	21.7	5.0
Junior College	1,267	19.5	8.4	44.6	3.6	9.1	25.1	36.5	9.7
Tech Institute	184	22.3	6.5	35.4	8.2	16.3	21.4	33.3	16.7
Voc-Tech Center	35	14.3	5.7	48.6	8.6	14.3	22.2	33.3	11.1
Certificate	326	9.8	5.2	46.7	6.7	22.3	19.3	31.7	22.1
Junior College	125	8.8	8.0	49.6	4.8	16.8	24.2	30.3	15.2
Tech Institute	106	10.4	3.8	39.6	9.4	32.1	20.5	31.8	25.0
Voc-Tech Center	95	9.5	5.3	50.6	6.3	18.9	9.4	28.1	34.4
Courses Only	275	18.9	8.7	48.3	3.3	10.5	21.4	33.0	4.9
<b>PART-TIME</b>	<b>825</b>	<b>15.2</b>	<b>13.6</b>	<b>15.6</b>	<b>16.7</b>	<b>17.1</b>	<b>19.4</b>	<b>43.2</b>	<b>13.5</b>
JC Degree	484	16.3	15.1	15.7	16.7	14.7	19.8	42.8	14.8
JC Certificate	96	11.5	10.4	18.7	13.5	29.2	16.0	34.7	13.3
JC Courses	245	14.3	11.8	14.3	18.0	17.1	20.1	46.9	12.0

<sup>a</sup>Base includes only those employed and reporting occupation.  
Three hundred eighty nine (12.9%) were employed in a variety of other jobs.

<sup>b</sup>Base includes only those employed and reporting occupation. One hundred fifty eight (10.2%) were employed in a variety of other jobs.

TABLE III-39  
MEAN HOURLY WAGES--1969 STUDENTS

Student Status	Males	Females
TOTAL	\$2.53	\$1.99
FULL-TIME	2.15	1.66
<u>Degree</u>	<u>2.14</u>	<u>1.65</u>
Branch Campus	1.92	1.51
Junior College	2.17	1.68
Tech Institute	2.07	1.58
Voc-Tech Center	2.02	1.07 <sup>a</sup>
<u>Certificate</u>	<u>2.13</u>	<u>1.59</u>
Junior College	2.31	1.77
Tech Institute	2.15	1.57
Voc-Tech Center	1.87	1.28
<u>Courses Only</u>	<u>2.21</u>	<u>1.81</u>
PART-TIME	3.43	2.56
JC Degree	3.47	2.59
JC Certificate	3.48	2.37
JC Courses	3.63	2.58

<sup>a</sup>N was less than 10.

TABLE 111-40  
USE OF EDUCATIONAL FINANCIAL AID SOURCES--1969 STUDENTS  
(In Percentages)

Males												Females												
Student Status	N	Did Not Apply	Applied, Denied	Applied, Received	Financial Aid Sources						N <sup>a</sup>	Applied, Denied	Applied, Received	Financial Aid Sources					N <sup>a</sup>	Commercial Loan	Federal Loan	State, Local Loan	School Scholar-ship	Other Scholar-ship
					Commercial Loan	Federal Loan	State, Local	School Scholar-ship	Other Scholar-ship	Commercial Loan				Federal Loan	State, Local	School Scholar-ship	Other Scholar-ship							
TOTAL	4,312	77.9	3.4	18.2	785	21.3	27.4	18.5	16.7	18.7	2,799	76.3	3.4	19.2	557	18.3	24.1	15.3	21.4	26.8				
FULL-TIME	3,420	75.2	3.8	20.4	696	20.5	27.3	19.6	17.0	19.8	2,005	71.6	0.4	23.8	477	17.8	26.6	16.1	20.5	27.9				
Degree	2,479	72.4	4.0	22.3	567	21.2	27.0	18.9	17.5	21.6	1,427	68.7	4.0	26.4	377	17.8	24.9	15.4	21.8	28.6				
Branch Campus	185	53.5	7.0	37.3	69	14.5	18.8	18.8	8.7	40.6	120	58.3	7.5	33.3	40	32.5	15.0	10.0	20.8	42.5				
Junior College	1,957	73.8	3.8	21.6	423	21.7	28.4	18.2	18.9	16.5	1,179	69.7	3.9	25.5	301	13.6	26.6	14.3	23.6	25.2				
Tech Institute	285	73.7	3.5	22.8	65	26.2	27.7	23.1	18.5	29.2	107	65.4	3.7	30.8	33	33.3	24.2	30.3	9.1	42.4				
Voc-Tech Center	52	78.8	1.9	19.2	10	10.0	20.0	20.0	10.0	20.0	21	85.8	-	14.3	3	66.7	-	33.3	-	33.3				
Certificate	551	82.6	3.1	13.8	76	18.4	21.1	23.7	9.2	15.8	370	79.6	2.7	17.6	65	24.2	19.7	19.7	12.1	19.7				
Junior College	210	76.2	3.8	19.5	41	26.8	17.1	24.4	12.2	14.6	140	77.6	2.1	19.3	27	29.6	22.2	7.4	22.2	22.2				
Tech Institute	164	87.2	0.6	11.6	19	15.8	26.3	31.6	5.3	21.1	116	78.4	2.6	19.0	22	18.2	18.2	31.8	-	13.6				
Voc-Tech Center	177	86.4	4.5	9.0	16	-	25.0	12.5	6.2	12.5	114	82.5	3.5	14.0	16	25.0	12.5	25.0	12.5	25.0				
Courses Only	390	82.3	3.8	13.6	53	17.0	39.6	17.0	22.6	13.2	208	77.4	5.3	16.8	35	5.7	37.1	17.1	22.9	24.3				
PART-TIME	892	88.2	1.8	10.0	89	27.0	28.1	12.4	14.6	10.1	794	88.2	1.8	10.1	80	21.3	18.8	10.0	26.3	20.0				
JC Degree	517	89.0	1.0	10.1	59	26.9	26.9	15.4	9.6	11.5	383	86.4	2.6	11.0	42	14.6	17.1	12.2	22.0	22.0				
JC Certificate	105	90.5	3.8	5.8	6	16.7	33.3	-	-	16.7	107	93.5	1.9	4.7	5	60.0	-	20.0	20.0	-				
JC Courses	270	85.9	2.6	11.5	31	29.0	29.0	9.7	25.8	6.5	304	88.5	0.7	10.9	33	24.2	24.2	6.1	33.3	21.2				

<sup>a</sup>Base includes only those who applied for and received financial aid. Per cents may add to more than 100 because of use of multiple sources.

#### IV. GRADUATES

The first phase of the study of community colleges and vocational training centers included a relatively small sample of recent graduates (June 1967). The main thrust of the study effort is a longitudinal one--with emphasis on following up student cohorts for whom data are being collected at various points in time, public two-year colleges and after they have moved into other schools or into the labor force. However, we decided to include in Phase I a retrospective component for the sake of obtaining a first set of benchmark data for graduates, against which future cohorts in the longitudinal study could be measured.

Because the study of graduates was thus conceived as supplemental rather than germane to the continuous data flow to be generated by the various phases of the study, a small sample size was believed adequate for the purpose at hand. Unfortunately, as explained in greater detail elsewhere in this report, our response rates were lower than we had originally expected, although they compared favorably with those obtained in another recent study dealing with comparable populations.<sup>1</sup>

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<sup>1</sup>A recent study of graduates of vocational-technical programs in high schools, post-high school institutions and junior colleges conducted by the University of Wisconsin Center for Studies in Vocational and Technical Education in collaboration with the BSSR is based on response rates ranging from 30-50 per cent for various subpopulations. Our investigations of response rate problems led us to the conclusion that this problem has become somewhat more serious in recent years as a result of the articulation of hostility to the proliferation of survey efforts in many quarters. However, the major problems with surveys of high school and junior college students are the lack of accurate addresses at the source (the school from which the student graduates), high rates of mobility in this population (out-of-area college attendance and military service), and some deterioration in the U. S. postal service.



Questionnaires were mailed to a total of 2,568 graduates and usable returns received from 1,455 (56.7%). By the time this sample was cross-classified by type of school, type of degree, and sex--three essential divisions for analytical purposes--we ended up with some very small cells, as can be seen in Table IV-1.

In this chapter the personal characteristics of the graduates are presented, together with their high school and two-year college experiences, their employment and financial status, and their additional educational pursuits. Sex, type of school attended, and terminating degree status (Associate Degree or Certificate) from the two-year institution are used as control variables throughout the analysis. The assumption was that there would be some differences between students in Associate Degree programs who register for two years, completing a unit of recognized academic work, and those who register for programs requiring less than two years of study. In addition, the student and graduate groups are compared whenever the data base is adequate.<sup>2</sup>

### Personal Characteristics

#### Sex and Age

The total graduate sample was about 60 per cent male and 40 per cent female. A similar distribution was maintained for those

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<sup>2</sup>These comparisons between the students who graduated in 1967 and the "current students" (fall 1969) should be treated with caution insofar as two-year college programs and recruitment policies were subject to considerable change in the intervening period. However, comparisons with earlier studies [see, for instance, Leland L. Medsker, The Junior College, Progress and Prospect (New York: McGraw-Hill, 1960)] suggest that the current student population does not differ as much from earlier cohorts as is often assumed.

graduating with an associate degree, but in the case of the certificate program the male proportion rose to over 70 per cent. The median age of all persons in the sample was 22.6 years. There were no outstanding differences in the age distribution of the sample by sex or type of school or program--the median age ranged from 22.2 (female vocational-technical certificate graduates) to 23.2 (male technical school certificate graduates), although women tended to be slightly younger than men, and certificate graduates older than degree graduates (Table IV-2).

Comparing full-time students and graduates, we observed similar sex distributions, except in the case of the certificate students where the 60-40 male-female proportions among students changed to 70-30 in favor of the males at the graduate level. From this it might be inferred that though women are as likely as men to complete their degree at the associate level, they are less likely to complete their certificate degree than the men. Another noteworthy finding was the comparatively high concentration of females in the age group 30 years or over in the certificate programs, both among students and graduates (14.9 per cent and 16 per cent respectively). Apparently, older women who enroll in junior college certificate programs are exceptionally likely to complete the programs in which they enroll. From the male-female ratio changes mentioned above it was seen that females in the certificate program were more likely not to complete their course than the males: tentatively it might be concluded that it is the younger age cohorts that "drop out"<sup>3</sup> most frequently.

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<sup>3</sup>The term "drop out" here connotes only noncompletion of that particular course; the reason may have been transfers to other courses or a four-year school. Longitudinal studies will throw more light on true dropout rates.

### Ethnic Status

A very high proportion of the graduates failed to reply to the "ethnic status" question; the nonresponse rate to this question was 6.8 per cent, but in certain subgroups, and especially among technical institute graduates, the proportion exceeded 10 per cent (see Table IV-3). Earlier studies have suggested that members of minority groups are especially prone to refuse to answer this question, but with current campus concern about racial issues, it is quite possible that white students also boycotted this question which is often believed to serve a "racist" purpose. Because of this high nonresponse rate, it is impossible to identify the proportion of minority group members in this group of graduates.

On ethnic status the graduate sample compared as follows with the student group:

Graduates	3.2% minority;	90.0% nonminority;	6.8% no answer
Students	8.5% "	87.8% "	3.8% "

In view of these distributions, it is impossible to draw firm conclusions about completion rates by ethnic status, although the data tentatively suggest somewhat lower completion rates for minority students. Here too, only longitudinal data can provide valid answers.

### Marital Status

The graduate sample was almost evenly distributed between those currently married and those never married (Table IV-4). The married group in turn was about evenly divided between childless graduates and those who had at least one child. Since the certificate program graduate

was older than the associate degree graduate, he was also more likely to be married and to have related familial responsibilities. As might be expected, graduates and students differed markedly with respect to marital status: over 80 per cent of the full-time two-year college students were "never married" in contrast to 53 per cent of the graduates.

#### Community Background

With respect to place of residence, the graduate and student samples were quite similar. In both samples one-sixth each had attended high school in the open country, small towns, large cities of 100,000 or more, or the suburbs; and one-third in medium-sized towns. The associate degree graduates were relatively more urban than those who graduated with a certificate. From Table IV-5 it can be seen that the associate graduates were three times as likely as the certificate graduates to be from large cities and twice as likely to be from medium sized towns, while the latter graduates were twice as likely to have been from the open country or small towns.

Comparing the residential backgrounds of all graduates with the student sample, we find that a slightly larger proportion of graduates came from small towns:

Community Background <sup>4</sup>	Graduates	Students
Open country	18.5 %	17.8 %
Small town	19.5 %	16.8 %
Medium city and suburb	32.1 %	32.3 %
Large city	15.6 %	18.0 %
Suburb of large city	11.0 %	12.9 %

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<sup>4</sup> Small town = fewer than 10,000 residents; medium size city and suburb = 10,000-100,000 residents; large city = over 100,000 residents.

This leads us to the tentative conclusion that completion rates are higher for the rural than the urban two-year college enrollees, perhaps because the opportunity to transfer to a four-year college before completion of a two-year program is more within the reach of the big city youth than the small town student.

#### Socioeconomic Background

The socioeconomic status of the graduates was being measured by three indicators--father's occupation, father's education, and the graduate's estimate of total family income during his last year in high school. From Table IV-6 it will be noted that slightly more blue collar workers' children than white collar workers'<sup>5</sup> children attended the two-year colleges (54% opposed to 43%, with 2.5% No Answer). Although the data are not fully consistent, the prevailing association was between higher socioeconomic status (as measured by father's occupation and education) and graduation from junior college associate programs. Conversely, completion of junior college certificate programs and graduation from technical institutes was more characteristic of sons and daughters from lower status families. Thus, graduates with associate degrees were twice as likely to have fathers with some post-high school education as those who terminated their program with a certificate--31 per cent of the former as compared to 15 per cent of the latter. The data also indicate that the junior college graduates had better educated fathers than those who had attended technical institutes and vocational-technical centers (for further details see Table IV-7).

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<sup>5</sup>Blue collar being defined as skilled, semi-skilled and service workers and white collar as professional, managerial, clerical and sales.

### Financial Background

The median family income of the graduates during their last year of high school was \$8,088. Almost 40 per cent of the graduates came from families whose median income was less than the national white family income for 1965 (\$7,170).<sup>6</sup> The two-year college graduate clearly came from a less affluent financial background than the 1965 four-year college freshman, whose median family income was approximately \$9,700.<sup>7</sup> However, over a third of the graduates had graduated from high school prior to 1965; hence, all comparisons are only tentative. Table IV-8 shows the mean and median family incomes of the graduates, and the details are shown in Table IV-9.

Family income (at the time of graduation from high school) was lower for female graduates than for males, and lower for certificate graduates than for associate degree graduates. Women in certificate programs came from the most deprived backgrounds, with over a third stating that their total family income during their last year in high school was less than \$5,000. Of the three types of schools, the vocational-technical centers catered to the lowest income groups with 40 per cent of the males and 30 per cent of the females coming from families whose total annual income was less than \$5,000. The financial background of the technical institute graduates was higher than that

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<sup>6</sup>U.S. Department of Commerce, Statistical Abstract, 1967, Table 472 and 477, p. 322.

<sup>7</sup>Robert J. Panos and Alexander W. Astin, College and University: A Profile of Entering 1965 College Freshmen (Washington, D.C.: American Council on Education), Vol. 42, Winter 1967, Table 1, p. 163. (1965 report was used since the majority of respondents graduated from high school in that year.)

of both the junior college and the vocational-technical center graduates. However, the male associate degree graduates from junior colleges came from families with higher median incomes than those from technical institutes.

Comparing the financial background of the graduates with that of the students by program, sex, and school type, one finds that at low family income levels (less than \$5,000) there were generally higher proportions of graduates than students, while at the highest family income levels (\$10,000 or more) there were consistently lower proportions of graduates than there were students. It was also seen that the graduate families' median income was approximately ten per cent lower than that of the students (\$8,088 against \$8,829). Although the possibility exists that the income differences between graduate and student respondents might be primarily the result of inflation between 1965 and 1968, the respective dates for which parental incomes were reported by the two groups, one might very tentatively conclude that the course completion rates of the lower income students are higher at the two-year colleges than the course completion rates of the higher income students. Another possible interpretation of this finding is that the transfer rate to other colleges before completion of courses is higher for the high income students than the low income students, due to their ability to meet the financial costs involved. Exceptions to the higher completion pattern of the less affluent students were noted for males from the certificate programs in technical institutes and females from certificate

programs in vocational-technical centers. Because comparatively very small proportions of these students go on to four-year colleges from these programs, the explanation might lie in higher dropout rates for the reason of job market entry on the part of the needier students from these work-oriented programs.

### High School Experience

The areas of high school experience that were touched upon in the questionnaire include high school curriculum, grade point average, and the graduate's evaluation of his high school program.

#### Major in High School

As with the student sample, more than half of the graduates had been enrolled in high school college preparatory programs. We also observed again a clear relationship between high school curriculum, post-high school program and type of two-year institution from which the respondent graduates. Those who graduated from junior colleges with associate degrees were most likely to have been in college preparatory programs in high school; those who graduated with a certificate from occupational schools were least likely to have this type of academic background (see Table IV-10).

#### Grade Point Average

Among all graduates, the men had a median high school grade of B- and the women had a median of B, regardless of program and school; the same distribution was characteristic of the student sample. The only exception to this pattern was a C+ median for males who attended



technical institutes and graduated with a certificate (see Table IV-11). The B- average for the total male graduate sample is higher than the C+ norm for all male freshmen entering two-year colleges but lower than the B average reported for four-year college freshmen.<sup>8</sup>

#### Graduates' Evaluation of High School Program

In an attempt to evaluate the graduate's view of the benefits derived from his high school program, he was asked whether he "agreed strongly," "agreed somewhat" or "did not agree" with the following six statements concerning his high school program:

1. Gave me ideas about the type of work I wanted to do.
2. Should have placed more emphasis on vocational and technical programs.
3. Should have placed more emphasis on basic academic subjects (math, science, English, etc.).
4. Did not offer enough practical work experience.
5. Provided me with counseling which enabled me to continue my education.
6. Provided me with counseling which enabled me to find employment.

The proportions who "agreed strongly" with these positively oriented statements about high school are presented in Table IV-12. Highest concurrence was achieved with regard to the adequacy of vocational and technical programs (48%). The least satisfaction was evident in the area of job counseling with only 2.6 per cent strongly agreeing

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<sup>8</sup>See American Council on Education, National Norms for Entering College Freshmen, Fall 1966 (Washington D.C.: American Council on Education, 1967), Vol. 2, No. 7, p. 5.

to its adequacy. As in the case of the students, responses were most favorable in areas most removed from the individual's direct experience. Thus, respondents with associate degrees and junior college graduates viewed the vocational and technical programs as more adequate than the academic programs, and the certificate and occupational school graduates held more favorable views of academic programs. In all respects, except job counseling, the graduates were more satisfied with their high school program than the students.

#### Other Postsecondary Schools Attended

One in six graduates had attended some other postsecondary institution before enrolling in the one from which they graduated. Of those who had done so, more than half had switched to a junior college from a four-year college (Table IV-13).

The prime reason for graduates' leaving institutions was "change of plans or loss of interest" (30%), with only one-eighth citing financial reasons. However, it was noted that for the certificate program graduates, financial matters were the most important reason for the switch (30%); considering their lower economic background, this was not surprising. (See Table IV-14.)

#### Two-Year College Experience

##### Major Field of Study

Table IV-15 presents the distribution of graduates by their major field. As in the case of the student sample, the largest proportion of students were in liberal arts and science (31%), and business and

sales (17%), and the smallest in agriculture (2%). Apart from liberal arts, which was equally popular for men and women, the sex-related patterns were evident with males dominating in the business, engineering and technical fields and females in the office, education and health programs.

#### Grade Point Average

The median grade point average reported by the graduates was B. In view of the possible wide variance in grading and testing standards between various institutions, it would be highly dubious to rely on this measure as a valid one for the purpose of program comparison. Despite this reservation, it might be seen from Table IV-16 that, of the associate degree graduates, the females were a more successful group than the males. The proportion of women with an A average was twice that of men (18% as compared to 9%); and the proportion of men, with a C average was almost twice that of women (40% as compared to 23%). On the other hand, in the case of the certificate program graduates, the opposite was the case; the males were seen to be academically more able than the females judging from their G.P.A. Here it was noted that while almost one-fourth of the males had A's, only about one-sixth of the females scored as high.

#### Rating of Two-year College Services

As in the case of the students, the graduates were asked to give their opinion on a battery of items dealing with school services and the general atmosphere of the institution. From Table IV-17 it can be seen that, for the graduate sample as a whole, the proportions agreeing

that a service was "excellent" ranged from highs of 49 to 54 per cent for student-teacher relations and school reputation to lows of 14 to 20 per cent for student participation in the school's academic and administrative decisions, intellectual atmosphere, and job counseling. The three services about which the students felt least enthusiastic also coincided with the lowest item response rates (53-69% only). If nonresponse could be interpreted as a means for resolving a dissonance resulting from negative impulses toward one's alma mater, then the rate of dissatisfaction with student participation, intellectual atmosphere, and job and academic counseling can be assumed to be even higher than Table IV-17 indicates.

It was interesting to note that the certificate graduates rated the schools significantly lower than the associate graduates on four of the eleven factors examined, namely quality of instruction, student activities, congeniality of student body, and availability of teachers outside classroom hours. On the other hand, of the associate degree graduates, men tended to be less satisfied with the quality of academic counseling, job counseling, student body congeniality, and availability of teachers outside class than women; women, however, were less satisfied than men with student activities, both social and athletic. (All differences were significant at the .05 level.)

The graduate's feelings about the relevance of the education received in the two-year college might be judged by his "strong agreement" with these nine statements:

1. Gave me new ideas about the type of work I wanted to do.
2. Wasted precious time and delayed my career.

3. Provided training and education helpful in my work.
4. Had little effect on my career one way or another.
5. Made an important contribution to my general education.
6. Provided me with education and/or training I could not have afforded otherwise.
7. Made it more likely that an employer will consider me for a responsible job.
8. Provided me with counseling which enabled me to continue my education.
9. Provided me with counseling which enabled me to find employment.

The largest proportion (76%) felt that the school's most important contribution had been to their general education, while over half of the respondents in each case felt that their education had been helpful in their work, had made them more likely candidates for responsible positions, and had provided them with an education they could not otherwise have afforded. As might have been expected, they were considerably less enthusiastic about both academic and vocational counseling with only 18 per cent positing positive sentiments.

It is apparent that work-oriented questions elicited more enthusiastic responses from graduates of technical institutes and occupational programs, than from other program graduates who may not as yet have reached a stage in their work careers where these questions could be answered meaningfully (see Table IV-18).

#### Major Problems

Both graduates and students reported that their major problem in school was their poor study habits. This self-blame was the most

popular "problem choice" for the graduate sample regardless of sex, school or program. Inadequate high school preparation was regarded as another major concern by the males: almost one-fifth of those who graduated with a certificate also had financial worries. The females, on the other hand, thought that many of the courses were a waste of time; certificate program female graduates also felt that their job took too much time. The distributions are shown in Table IV-19.

#### Financial Matters

Very few graduates (5%) said they had great difficulty financing their two-year college education, while about two-thirds reported no difficulty at all. In other words, about one-third did face some difficulty in financing those college years. There were no major differences in this respect by sex, program or type of institution (Table IV-20).

#### Employment

As was the case for the students, the majority of the graduates had been working--usually part-time--while attending the two-year college. Over two-thirds of the graduates had worked--about 15 per cent full-time and 57 per cent part-time. Considering this work history it was not surprising to find that on graduating they experienced little difficulty in getting jobs--fewer than 3 per cent sought work unsuccessfully.

By and large it can be said that the two-year colleges are of two different orientations. The junior college associate degree program is primarily school-oriented. This is true not only of the transfer program, but also of many of the so-called vocational-technical programs which lead to the associate degree. Associate programs in technical

institutes and the certificate programs in all institutions are primarily occupation-oriented. Only one-third of the associate graduates went on to full-time work while the proportion doubled in the case of the certificate graduates. On the other hand, over one-half of the associates went on for further full-time education as opposed to one-eighth of the certificate graduates. In both programs, men tended to go on directly to full-time school or college more often than women (see Table IV-21). The proportion going on to military service, part-time study and/or employment, or full-time housewife status was negligible.<sup>9</sup>

Information on the graduates' employment status was sought at two points in time: first immediately after graduation and then at the time of questionnaire completion, approximately 18-24 months later. Table IV-21 and IV-22 show first postschool status and "current" status of the graduates.

Part-time employment, so popular with students, (see Chapter III) was not popular with graduates either immediately after graduation or at the time of questionnaire completion, with fewer than 10 per cent so employed at both points in time. The proportions employed full-time rose from 40 per cent to 49 per cent during the two-year period in question. At the same time the proportions engaged in full-time study decreased by 15 per cent from 43 per cent immediately after graduation from two-year college to 28 per cent about two years later. The increase in the proportion who joined the labor market and the decrease in the proportion

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<sup>9</sup>With respect to military service, these proportions represent, no doubt, an understatement, since a fairly high proportion of non-respondents were in military service, as disclosed by the special nonrespondent survey (see Appendix B).

in school were probably due to completion of courses at four-year colleges (of those who continued studies a third received the bachelor's degree). Another interesting point is that, despite the increase in the national unemployment rate during the period in question, the unemployed proportion in our sample decreased from 3.4 per cent to 2.7 per cent; at both points in time it was below the national figure of 5-6 per cent.

In addition to the employment status of the graduates at the two points in time already discussed, we also sought information on whether or not the graduates had any full-time work experience since their two-year college graduation. The proportion who did at some time hold a full-time job after graduation was high--almost two-thirds. From Table IV-23 it will be seen that 90 per cent or more of the certificate program and technical institute and vocational-technical center graduates had worked full-time at some time since graduation, although the average for the entire sample was only 63 per cent. In other words, those graduating with associate degrees from junior colleges were least likely to have worked.

As might have been expected, graduates from occupational schools and certificate programs often found more training-related jobs than the junior college degree graduates. Job opportunities for male junior college graduates appeared to be highest in the business, sales, and T & I fields, with over sixty per cent of both the associate degree and certificate holders who joined the labor force immediately after graduating going into these fields. Of the male technical school associate degree holders, the highest proportion (over 40%) went into the area of engineering or engineering technology; the second highest



concentration (almost 30%) was in the area of business and sales. Of male certificate holders from the technical and vocational-technical centers, by far the majority (over 90%) found work in the engineering, trade and industrial occupations--the T & I occupations being more popular for the vocational-technical graduates than for the technical institute graduates. Regardless of school or program, three out of four women found jobs either in the business, sales, or health fields (Table IV-24).

Almost one in four who had worked since graduation either had a job lined up prior to graduation or continued to work in a job held while still in school. In the case of the certificate graduates this was true for one in three. The most popular source of help for employment was the school instructor (20%), especially in the case of the associate degree graduates from the technical schools (30.4%). Employment agencies (both state and private) were rarely used for leads to employment; only 7 per cent of the graduates said they got their first full-time job through such offices (refer to Table IV-25).

Finding work was not a problem for the graduates. Almost 85 per cent said that they had not experienced any unemployment whatsoever since graduation, and only two per cent had been unemployed for more than four months of the two-year period since graduation. For all those who had experienced some unemployment the median period was 1.9 months. In terms of program and sex, it was noted that female certificate program graduates showed the highest incidence of unemployment during the period since graduation (39%), (see Table IV-26).

Besides unemployment, there were other reasons that kept the graduates out of the labor market. Of all graduates not available for work, further schooling kept out by far the major proportion (over 70%), while over 30 per cent of the men who were not available for work were in one of the services. Further schooling was the prime reason for the associate degree graduates not joining the labor market; for certificate program male graduates, military service was the major reason (80%), (see Table IV-27).

Fewer than one-third of the graduates had switched from one type of work to another since their first full-time job after graduation. There were proportionately more graduates who changed jobs from the certificate program than from the associate degree program, and more from occupational schools than from junior colleges.

### Wages

The modal starting hourly wage category for the graduates on their first full-time job was \$2.00-\$2.49 (27%) with the rest divided about equally into those earning less and those earning more (36% each respectively). The starting averages indicated a mean hourly rate of \$2.31 and a median hourly rate of \$2.26, which on the basis of a 5 day week and an 8 hour day constituted an annual salary of about \$4,805 (mean) and \$4,700 (median). Details of starting wage rates are given in Table IV-28.<sup>10</sup>

The associate degree graduates started with appreciably higher wages than the certificate graduates (about 40% higher) with an average

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<sup>10</sup>Although there are variations in the time period for which this starting wage was reported, it can be safely assumed that the figures refer generally to 1967.

hourly rate of \$2.65 as opposed to \$1.90. Male technical institute graduates earned more on their first full-time job than graduates from other schools with a starting hourly rate of \$2.80 (which computes to \$5,824 annual average). Inequalities of earning by sex are evident regardless of school or program type.

From Table IV-29, which gives the average starting and current wage of the graduates as well as the wage rate increments, it will be noted that the gap between starting wage rates tends to get narrower over time, with those with lower starting wages getting larger percentage increases. The overall average increment in wage rate for the sample was over 30 per cent which is definitely more than possible cost of living adjustments for the period 1967-1969.

The current median wage rates of both the male and female associate degree graduates (\$3.22 and \$2.54 respectively) were about ten per cent higher than the national 1969 median wage rates for male and female 20-24 year olds (\$2.96 and \$2.24 respectively). However, the median wage rates for the certificate holders (males \$2.56 and females \$2.00) were below the national average.<sup>11</sup>

The current mean wage rate was still highest for male associate degree graduates from technical institutes (\$3.24) and lowest for female certificate degree graduates from vocational-technical centers who,

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<sup>11</sup> For year-round full-time workers, aged 20 to 24 years, males' money income in 1969 was \$6,169 (median) which, for a 5 day week and an 8 hour day, is equivalent to \$2.95 per hour. Females earned \$4,684 (median) equivalent to \$2.25 per hour. Source: Department of Commerce, Bureau of the Census, Current Population Reports, Consumer Income, Series P-60, No. 70, July 1970, p. 5.

despite their almost 70 per cent boost, had only progressed to a wage of \$2.00 (mean). Half the females from certificate programs were still earning less than \$2.00. The males from the same program did much better; having started at \$2.00 they worked up to \$2.48 at the time they filled out the questionnaire. Details of current wage rates are presented in Table IV-30.

#### Post-Junior College Education: Goals and Aspirations

Two-year college graduation was educationally terminal for fewer than 30 per cent of the graduates. The rest continued either full-time or part-time with further education. Of the group of continuing students, one-third received a bachelor's degree and 13 per cent had earned a certificate by the time they completed the questionnaire, approximately two years later (see Table IV-31). Most of the new certificates were earned by those in earlier certificate programs.

As was to be expected, male graduates of a junior college with associate degrees were most likely to go on for further education (87%), while females graduating with associate degrees from a technical school or with certificates regardless of school were the least likely to go on for further education (25-33%). What was perhaps most interesting was the fact that, though the technical institutes and vocational-technical centers tend to have an image of being terminal work-oriented, about half of their male graduates sought additional education, often in four-year institutions, particularly among technical institute graduates. Similar findings were reported in a survey conducted by the BSSR and the University of Wisconsin of a sample of 1966 two-year college graduates in vocational-terminal programs. In that study it was observed that

except for the health program, 25 to 50 per cent of the graduates in so-called terminal programs went on for additional four-year college work.<sup>12</sup>

From Table IV-32, it can be seen that if the graduate continued his studies at all, he was almost three times more likely to do it on a full-time rather than a part-time basis (53.6% to 19.1%). Part-time study, however, was more popular in the case of the certificate program graduates where equal proportions of males studied full- and part-time (27%), while in the case of the females, the part-time enrollment was double (20.8% part-time and 10.4% full-time). Besides the economic factor, it is possible that the careers of female graduates better accommodate part-time study.

Almost four out of five graduates who sought further education enrolled in four-year colleges. This proportion rose to nine out of ten for the associate degree graduates and dropped to less than one in four for the certificate degree graduates.

For men who had graduated with a certificate, the trade and technical schools and apprentice programs showed equal popularity with the four-year college (about 25% enrolled in each of the three types of schools). For women certificate holders, trade and technical schools, adult education courses, and business schools were more popular than four-year colleges. (The relevant distribution is shown in Table IV-33).

The status of the two-year college is tested by the graduates' ability to gain acceptance by four-year schools. From Table IV-34 it can be seen that half of the graduates who sought further education in a

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<sup>12</sup> Bureau of Social Science Research, Graduates of Vocational-Terminal Programs in Junior Colleges (Washington, D. C.: Bureau of Social Science Research, September, 1970), p. 162.

four-year college said that all their junior college credits were accepted. In the case of nonacceptance, the number of credits involved was relatively small. Sixty per cent of the cases involved six credits or less. Further, more than 80 per cent of the four-year college enrollees said that they enrolled as third year students (61-90 credit hours).

When asked for their reasons for continuing their education beyond their junior college program, over one-third of the graduates said that their main purpose was to advance in their career; another 25 per cent each said it was to further their general education and to obtain an additional degree; one-eighth said they wanted to prepare for a career unrelated to that of their two-year college education. Thus the main purpose for seeking further education was split 50-50 by career and educational orientations. In the case of the certificate program graduates the career motivation dominated, with a ratio of 1:3 in favor of the former reason (see Table IV-35).

Junior college graduates were academically more ambitious than technical institute graduates, males more than females and associate degree graduates more than certificate program graduates. Ambitions for academic degrees varied appreciably among graduates by type of school and program. Male graduates from the junior college program were the most ambitious with almost half of them aspiring at least to a master's degree. At the other extreme were the female certificate program graduates from vocational-technical centers, almost all of whom had no aspirations beyond the certificate they had already earned. The latter group, as previously mentioned, were also the most poorly paid, suggesting that these programs were undoubtedly not very successful

in bringing about a significant rise in career aspirations or even satisfactory earnings for these students (see Table IV-36).

Life time career goals were still a challenging decision for over 20 per cent of the graduates who were undecided two years after they had completed the first--or only--phase of their post-high school education. Of those who were closer to a career goal, the highest proportion (17%) would like to be teachers, and 15 per cent saw a future in business, sales and data processing.

#### SECTION IV TABLES

Note: The row percentages in some tables may not add up to 100 per cent either due to rounding or to inclusion of "No answer" in the base which are not shown in percentage columns.



TABLE IV-1

SAMPLE OF GRADUATES, BY TYPE OF SCHOOL, TYPE OF DEGREE AND SEX  
(Weighted Frequencies)<sup>a</sup>

	Total	Male	Female
TOTAL	1,455	860	595
ASSOCIATE	1,169	666	503
Branch Campus	8	6 <sup>b</sup>	2 <sup>b</sup>
Junior College	1,025	567	458
Technical Institute	131	89	42
Voc-Tech Center	5	4 <sup>b</sup>	1 <sup>b</sup>
CERTIFICATE	284	193	91
Branch Campus	2	2 <sup>b</sup>	-
Junior College	122	82	40
Technical Institute	63	49	14 <sup>b</sup>
Voc-Tech Center	97	60	37
NO ANSWER	2	1 <sup>b</sup>	1 <sup>b</sup>

<sup>a</sup>In this and all subsequent tables, weighted frequencies are shown. See Appendix A for a full presentation of weighted and unweighted frequencies, and description of the weighting process.

<sup>b</sup>Because of the small number of cases, these cells were excluded from the subsequent analysis, leaving a grand total of 1,424 cases for subsequent tabulations.

TABLE IV-2  
AGE OF 1967 GRADUATES IN 1969  
(In Percentages)

Sex, Graduating Status and School	N	Years						Median
		19 or Younger	20-24	25-29	30-34	35-39	40 or Over	
TOTAL	1,418	-	81.0	11.7	3.4	1.6	2.3	22.6
<hr/>								
ASSOCIATE	1,153	-	82.5	10.7	3.3	1.6	1.9	22.5
<u>Total Males</u>	<u>653</u>	-	<u>77.5</u>	<u>15.5</u>	<u>4.6</u>	<u>0.2</u>	<u>1.5</u>	<u>22.7</u>
Junior College	566	-	76.9	15.7	4.4	1.0	1.8	22.7
Technical Institute	87	-	77.5	13.7	5.6	0.8	-	22.7
<u>Total Females</u>	<u>500</u>	-	<u>89.0</u>	<u>4.4</u>	<u>1.6</u>	<u>2.6</u>	<u>2.4</u>	<u>22.3</u>
Junior College	458	-	89.8	3.2	1.6	2.9	2.4	22.2
Technical Institute	42	-	80.1	16.5	-	-	3.4	22.5
<hr/>								
CERTIFICATE	265	-	74.3	16.2	3.8	1.5	4.2	22.9
<u>Total Males</u>	<u>190</u>	-	<u>71.7</u>	<u>21.4</u>	<u>4.7</u>	<u>1.0</u>	<u>1.0</u>	<u>23.0</u>
Junior College	81	-	74.5	18.5	3.5	1.8	1.8	22.8
Technical Institute	49	-	68.3	20.4	11.3	-	-	23.2
Voc-Tech Center	60	-	69.0	26.9	-	2.0	2.1	23.0
<u>Total Females</u>	<u>75</u>	-	<u>81.3</u>	<u>2.7</u>	<u>1.3</u>	<u>2.7</u>	<u>12.0</u>	<u>22.5</u>
Junior College	38	-	68.0	5.4	3.6	3.6	17.6	23.0
Voc-Tech Center	37	-	91.6	-	-	2.5	4.5	22.2

TABLE IV-3  
ETHNIC GROUP MEMBERSHIP--1967 GRADUATES  
(In Percentages)

Student Status	N	Nonminority	Minority	No Answer
TOTAL	1,424	90.0	3.2	6.8
ASSOCIATE	1,156	89.9	3.8	6.3
<u>Total Males</u>	<u>656</u>	<u>89.5</u>	<u>3.2</u>	<u>7.3</u>
Junior College	567	90.4	3.2	6.0
Technical Institute	89	82.9	1.1	16.0
<u>Total Females</u>	<u>500</u>	<u>90.4</u>	<u>4.8</u>	<u>4.8</u>
Junior College	458	85.5	4.7	9.8
Technical Institute	42	97.4	2.6	-
CERTIFICATE	268	90.3	0.4	9.3
<u>Total Males</u>	<u>191</u>	<u>89.5</u>	<u>-</u>	<u>10.5</u>
Junior College	82	96.5	-	3.5
Technical Institute	49	90.0	-	10.0
Voc-Tech Center	60	79.6	-	20.4
<u>Total Females</u>	<u>77</u>	<u>92.2</u>	<u>1.4</u>	<u>6.4</u>
Junior College	40	87.4	1.8	10.8
Voc-Tech Center	37	97.3	-	2.7

TABLE IV-4  
CURRENT (1969) MARITAL STATUS, 1967 GRADUATES  
(In Percentages)

Student Status	N	Never Married	Married, No Children	Married, Children	(Widowed, Divorced Separated)
TOTAL	1,424	52.9	25.6	20.0	1.4
ASSOCIATE	1,156	55.3	24.5	18.9	1.2
<u>Total Males</u>	<u>656</u>	<u>52.0</u>	<u>24.4</u>	<u>22.7</u>	<u>0.9</u>
Junior College	567	54.0	23.7	21.4	0.9
Technical Institute	89	39.2	29.3	30.1	1.4
<u>Total Females</u>	<u>500</u>	<u>59.6</u>	<u>24.6</u>	<u>14.0</u>	<u>1.6</u>
Junior College	458	59.9	24.3	14.3	1.3
Technical Institute	42	57.2	28.0	11.5	3.3
CERTIFICATE	268	42.5	30.2	24.6	2.7
<u>Total Males</u>	<u>191</u>	<u>41.9</u>	<u>28.3</u>	<u>28.3</u>	<u>1.5</u>
Junior College	82	42.5	19.8	34.3	3.5
Technical Institute	49	41.3	32.1	26.6	-
Voc-Tech Center	60	41.9	36.6	21.5	-
<u>Total Females</u>	<u>77</u>	<u>44.2</u>	<u>35.1</u>	<u>15.6</u>	<u>5.1</u>
Junior College	40	37.3	29.6	22.3	10.8
Voc-Tech Center	37	50.7	40.0	6.8	2.5

TABLE IV-5

TYPE OF COMMUNITY LIVED IN DURING LAST YEAR OF HIGH SCHOOL--1967 GRADUATES  
(In Percentages)

	N	Open Country	Small Town	Medium Size	Large City	Suburb
TOTAL	1,424	18.5	19.5	32.1	15.6	11.0
ASSOCIATE	1,156	15.0	16.3	35.1	17.7	12.8
<u>Total Males</u>	<u>656</u>	<u>18.0</u>	<u>16.6</u>	<u>35.1</u>	<u>15.1</u>	<u>11.3</u>
Junior College	567	15.1	14.3	37.4	16.9	13.1
Technical Institute	89	35.8	31.8	20.2	3.4	-
<u>Total Females</u>	<u>500</u>	<u>11.0</u>	<u>15.8</u>	<u>35.2</u>	<u>21.2</u>	<u>14.8</u>
Junior College	458	8.7	15.2	36.7	21.2	15.9
Technical Institute	42	35.2	22.0	19.0	21.4	2.4
CERTIFICATE	268	31.0	33.2	19.0	6.3	3.0
<u>Total Males</u>	<u>191</u>	<u>34.0</u>	<u>33.0</u>	<u>17.8</u>	<u>6.3</u>	<u>3.7</u>
Junior College	82	25.0	29.7	25.0	11.0	7.3
Technical Institute	49	44.4	16.8	24.5	4.1	2.0
Voc-Tech Center	60	38.7	55.5	3.3	1.7	-
<u>Total Females</u>	<u>77</u>	<u>23.4</u>	<u>33.8</u>	<u>22.1</u>	<u>6.5</u>	<u>1.3</u>
Junior College	40	29.6	18.4	25.0	12.5	2.5
Voc-Tech Center	37	39.3	52.2	18.9	-	-

TABLE IV-6

FATHER'S MAJOR OCCUPATION--1967 GRADUATES  
(In Percentages)

	N	Professional, Managerial	Clerical, Sales	Skilled Trades	Semi- Skilled	Service Worker
TOTAL	1,424	35.2	7.9	28.2	20.4	5.6
ASSOCIATE	1,156	35.6	8.5	27.8	19.3	6.3
<u>Total Males</u>	<u>656</u>	<u>37.5</u>	<u>8.5</u>	<u>26.8</u>	<u>19.7</u>	<u>5.0</u>
Junior College Technical Institute	567 89	38.8 29.2	9.1 4.0	25.7 43.8	18.7 25.8	5.8 -
<u>Total Females</u>	<u>500</u>	<u>33.0</u>	<u>8.4</u>	<u>29.0</u>	<u>18.8</u>	<u>8.0</u>
Junior College Technical Institute	458 42	32.8 35.7	9.0 2.4	29.3 26.2	17.7 31.0	8.7 -
CERTIFICATE	268	33.6	5.2	30.2	25.4	2.6
<u>Total Males</u>	<u>191</u>	<u>32.5</u>	<u>7.3</u>	<u>30.4</u>	<u>23.6</u>	<u>3.1</u>
Junior College Technical Institute Voc-Tech Center	82 49 60	23.5 46.9 31.7	8.3 8.7 5.5	31.7 20.4 36.7	29.3 16.3 21.7	- 8.2 3.3
<u>Total Females</u>	<u>77</u>	<u>36.4</u>	<u>-</u>	<u>29.9</u>	<u>29.9</u>	<u>1.3</u>
Junior College Voc-Tech Center	40 37	35.0 37.8	- -	32.5 27.0	27.5 32.4	2.5 -

TABLE IV-7

FATHER'S EDUCATIONAL ATTAINMENT--1967 GRADUATES  
(In Percentages)

	N	Grade School	Some High School	High School Graduate	Technical, Business	Some College	College Graduate	Graduate Degree
TOTAL	1,424	22.3	20.9	27.0	7.4	9.6	6.2	4.7
ASSOCIATE	1,156	19.9	18.6	28.4	8.7	10.8	6.9	4.6
Total Males	656	21.0	17.5	27.4	7.9	11.9	7.3	3.8
Junior College	567	20.3	17.5	27.7	8.1	13.0	7.1	4.5
Technical Institute	89	26.3	18.1	26.3	7.2	4.8	9.3	-
Total Females	500	18.4	20.0	29.6	2.6	2.4	6.4	5.6
Junior College	458	18.0	19.1	29.5	9.3	10.1	6.3	6.2
Technical Institute	42	23.3	28.8	29.7	11.9	1.3	5.1	-
CERTIFICATE	268	32.8	30.6	21.3	2.2	4.5	3.0	5.2
Total Males	191	29.8	31.9	21.9	2.0	4.0	3.6	6.8
Junior College	82	15.8	30.3	31.3	4.4	3.3	7.5	7.5
Technical Institute	49	40.3	30.8	22.8	-	1.1	-	4.4
Voc-Tech Center	60	39.5	34.1	8.7	-	6.7	1.8	8.9
Total Females	77	40.3	27.3	19.5	2.6	5.2	1.3	1.3
Junior College	40	24.8	31.5	19.8	4.7	7.7	2.6	3.6
Voc-Tech Center	37	55.8	21.9	19.5	-	1.9	-	-

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TABLE IV-8

TOTAL FAMILY INCOME DURING LAST YEAR<sup>a</sup>  
IN HIGH SCHOOL--1967 GRADUATES  
(Mean and Median Dollar Figures)

	N	Mean	Median
TOTAL	1,311	\$8,764	\$8,088
ASSOCIATE	1,075	9,042	8,348
<u>Total Males</u>	<u>613</u>	<u>9,257</u>	<u>8,550</u>
Junior College	535	9,407	8,698
Technical Institute	78	8,231	7,794
<u>Total Females</u>	<u>462</u>	<u>8,758</u>	<u>8,020</u>
Junior College	427	8,734	7,926
Technical Institute	35	9,059	8,846
CERTIFICATE	236	7,476	6,850
<u>Total Males</u>	<u>174</u>	<u>7,716</u>	<u>6,936</u>
Junior College	70	7,870	7,288
Technical Institute	45	9,125	8,714
Voc-Tech Center	59	6,466	5,667
<u>Total Females</u>	<u>62</u>	<u>6,815</u>	<u>6,538</u>
Junior College	31	6,742	6,000
Voc-Tech Center	31	6,887	7,107

<sup>a</sup>About one-third had graduated from high school prior to 1965.



TABLE IV-9

TOTAL FAMILY INCOME DURING LAST YEAR IN HIGH SCHOOL--1967 GRADUATES  
(In Percentages)

	N	Less than \$3,000	\$3,000- \$4,999	\$5,000- \$6,999	\$7,000- \$9,999	\$10,000- \$14,999	\$15,000 or Above
TOTAL	1,311	5.6	12.3	20.9	30.8	19.9	10.4
ASSOCIATE	1,075	11.7	5.4	19.9	31.3	21.1	11.7
<u>Total Males</u>	<u>613</u>	<u>6.0</u>	<u>7.8</u>	<u>18.6</u>	<u>33.2</u>	<u>20.6</u>	<u>13.1</u>
Junior College	535	6.2	7.8	17.7	32.6	22.0	13.7
Technical Institute	78	5.6	8.9	24.9	43.5	10.2	7.0
<u>Total Females</u>	<u>462</u>	<u>4.5</u>	<u>14.5</u>	<u>21.6</u>	<u>27.7</u>	<u>21.9</u>	<u>10.0</u>
Junior College	427	4.7	14.2	22.9	26.8	21.2	10.2
Technical Institute	35	3.6	18.7	6.2	36.8	28.5	6.2
CERTIFICATE	236	6.8	19.1	25.4	28.8	14.4	4.2
<u>Total Males</u>	<u>174</u>	<u>5.2</u>	<u>17.8</u>	<u>27.0</u>	<u>28.7</u>	<u>13.8</u>	<u>5.7</u>
Junior College	70	4.1	10.3	31.2	37.9	10.2	6.2
Technical Institute	45	2.4	13.8	15.2	32.0	28.9	7.8
Voc-Tech Center	59	9.2	30.7	30.5	17.4	7.0	5.2
<u>Total Females</u>	<u>62</u>	<u>11.3</u>	<u>22.6</u>	<u>21.0</u>	<u>29.0</u>	<u>16.1</u>	<u>-</u>
Junior College	31	18.4	17.8	22.9	13.8	25.8	-
Voc-Tech Center	31	3.0	27.3	19.7	44.7	5.2	-

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TABLE IV-10  
MAJOR PROGRAM IN HIGH SCHOOL--1967 GRADUATES  
(In Percentages)

	N	College Prep	General	Business	Voc-Tech
TOTAL	1,424	59.5	23.7	8.6	7.2
ASSOCIATE	1,156	66.5	21.0	8.0	4.0
<u>Total Males</u>	<u>656</u>	<u>61.7</u>	<u>26.1</u>	<u>6.1</u>	<u>5.2</u>
Junior College	567	63.0	25.1	6.0	5.1
Technical Institute	89	52.5	32.4	6.2	5.6
<u>Total Females</u>	<u>500</u>	<u>72.8</u>	<u>14.4</u>	<u>10.6</u>	<u>1.2</u>
Junior College	458	74.5	14.9	9.3	1.1
Technical Institute	42	55.1	18.2	25.0	1.7
CERTIFICATE	268	29.1	35.1	10.8	23.1
<u>Total Males</u>	<u>191</u>	<u>30.4</u>	<u>40.3</u>	<u>2.6</u>	<u>26.2</u>
Junior College	82	35.6	36.8	5.3	22.4
Technical Institute	49	28.4	25.7	1.1	44.8
Voc-Tech Center	60	24.2	56.9	-	15.9
<u>Total Females</u>	<u>77</u>	<u>26.0</u>	<u>22.1</u>	<u>31.2</u>	<u>15.6</u>
Junior College	40	42.4	14.4	30.6	1.8
Voc-Tech Center	37	7.7	29.4	32.2	29.7

TABLE IV-11  
HIGH SCHOOL GRADE POINT AVERAGE--1967 GRADUATES  
(In Percentages)

	N	A or A+ 93+	A- 90-92	B+ 87-89	B 83-86	B- 80-83	C+ 77-79	C 70-76	D 65-69	Median
TOTAL	1,373	4.5	4.1	16.1	22.7	16.5	19.1	16.2	0.9	B-
ASSOCIATE	1,121	4.9	4.3	17.5	21.4	16.3	18.6	15.7	1.0	B-
Total Males	630	3.1	3.0	12.3	17.8	16.6	21.2	24.1	1.9	B-
Junior College	549	3.3	3.4	12.7	16.7	15.7	21.3	24.9	1.9	B-
Technical Institute	81	2.6	-	16.2	24.2	23.0	21.2	17.9	0.9	B-
Total Females	491	7.3	6.1	24.2	26.0	15.8	15.2	4.9	-	B
Junior College	449	7.8	6.1	24.9	26.4	15.2	14.6	5.0	-	B
Technical Institute	42	3.4	6.8	16.9	23.7	24.6	23.3	1.3	-	B
CERTIFICATE	252	2.3	2.7	9.5	28.5	17.0	21.0	18.2	-	B-
Total Males	182	-	0.5	10.9	22.5	19.2	26.3	20.3	-	B-
Junior College	75	-	-	7.6	18.5	25.5	21.5	26.9	-	B-
Technical Institute	47	-	-	11.6	22.9	7.8	33.6	24.2	-	C+
Voc-Tech Center	60	-	0.9	14.3	26.6	20.3	27.3	10.4	-	B-
Total Females	70	8.6	8.6	5.7	44.3	11.4	7.1	12.9	-	B
Junior College	36	8.0	-	9.5	40.1	18.4	12.0	12.0	-	B
Voc-Tech Center	34	7.9	17.3	2.7	49.0	4.2	2.6	15.8	-	B

TABLE IV-12

EXTENT OF POSITIVE EVALUATION OF HIGH SCHOOL EDUCATION--1967 GRADUATES  
(In Percentages)

	N	Gave New Ideas About Types of Work	Enough Emphasis on Vocational and Technical Programs	Enough Emphasis on Basic Academic Subjects	Enough Practical Work Experience	Adequate Educational Counseling	Adequate Job Counseling
TOTAL	1,424 <sup>a</sup>	18.7	48.1	37.4	34.6	22.8	2.6
ASSOCIATE	1,156	18.8	52.9	39.1	36.8	22.7	2.2
<u>Total Males</u>	<u>656</u>	<u>15.2</u>	<u>53.4</u>	<u>35.1</u>	<u>35.5</u>	<u>19.5</u>	<u>0.9</u>
Junior College	567	15.7	59.8	35.1	37.0	18.3	1.1
Technical Institute	89	12.4	22.5	34.8	25.8	30.0	-
<u>Total Females</u>	<u>500</u>	<u>23.4</u>	<u>52.4</u>	<u>44.4</u>	<u>38.6</u>	<u>27.0</u>	<u>4.0</u>
Junior College	458	23.1	54.1	43.9	40.0	28.2	3.5
Technical Institute	42	26.2	33.3	50.0	23.8	14.3	9.5
CERTIFICATE	268	18.7	27.2	30.2	25.0	22.8	4.1
<u>Total Males</u>	<u>191</u>	<u>16.8</u>	<u>28.8</u>	<u>27.2</u>	<u>29.3</u>	<u>21.5</u>	<u>4.7</u>
Junior College	82	15.9	29.3	30.5	24.4	17.1	4.9
Technical Institute	49	12.2	22.4	24.5	36.7	18.4	-
Voc-Tech Center	60	21.7	33.3	25.0	30.0	30.0	8.3
<u>Total Females</u>	<u>77</u>	<u>23.4</u>	<u>23.4</u>	<u>37.7</u>	<u>15.6</u>	<u>26.0</u>	<u>2.6</u>
Junior College	40	12.5	27.5	32.5	25.0	15.0	5.0
Voc-Tech Center	37	35.1	18.9	43.2	5.4	37.8	-

<sup>a</sup>Table does not present the complete distribution of answers. Only those who "agree strongly" with the positive statement are shown.

TABLE IV-13

ATTENDANCE AT POSTSECONDARY SCHOOLS BEFORE ENROLLING IN INSTITUTION  
FROM WHICH RESPONDENTS GRADUATED AND TYPE OF SCHOOL--1967 GRADUATES  
(In Percentages)

Other Postsecondary Schools Attended				Type of Postsecondary School Attended			
	N	None	One or More	N	Vocational	Other Junior College	4-Year College
TOTAL	1,424	83.3	16.7	238 <sup>a</sup>	13.9	13.4	51.7
ASSOCIATE	1,156	82.1	17.9	207	11.6	15.0	53.1
Total Males	656	79.1	20.9	137	13.1	14.6	53.3
Junior College	567	78.3	21.7	123	13.8	14.6	54.5
Technical Institute	89	84.3	15.7	14	7.1	14.3	42.8
Total Females	500	86.0	14.0	70	8.6	15.7	52.5
Junior College	458	86.2	13.8	63	9.5	17.5	54.0
Technical Institute	42	83.3	16.7	7	-	-	42.8
CERTIFICATE	268	88.4	11.6	31	29.0	3.2	41.9
Total Males	191	87.4	12.6	24	33.3	4.2	41.7
Junior College	82	92.7	7.3	6	-	16.7	16.7
Technical Institute	49	81.6	18.4	9	22.2	-	66.7
Voc-Tech Center	60	85.0	15.0	9	66.7	-	33.3
Total Females	77	90.9	9.1	7	14.3	-	42.8
Junior College	40	82.5	17.5	7	14.3	-	42.8
Voc-Tech Center	37	100.0	-	-	-	-	-

<sup>a</sup>The base N represents 16.7 per cent of total sample(1,424). Fifty (21%) went to "other" types of schools.

TABLE IV-14

REASONS FOR LEAVING POSTSECONDARY SCHOOLS ATTENDED PRIOR TO  
INSTITUTION FROM WHICH RESPONDENTS GRADUATED--1967 GRADUATES  
(In Percentages)

	N	Personal	Financial	Military Service	Completion	Dismissal	Change of Plans, Loss of Interest	Other
TOTAL	227	16.3	12.8	2.2	22.0	15.9	29.5	1.3
ASSOCIATE	198	16.7	10.1	2.0	22.7	17.7	29.3	1.0
<u>Total Males</u>	<u>130</u>	<u>12.3</u>	<u>10.8</u>	<u>3.1</u>	<u>20.8</u>	<u>18.5</u>	<u>33.0</u>	<u>1.5</u>
Junior College	116	11.2	11.2	3.5	21.6	17.2	33.6	1.7
Technical Institute	14	21.4	7.1	-	14.3	28.6	28.6	-
<u>Total Females</u>	<u>68</u>	<u>25.0</u>	<u>8.8</u>	<u>-</u>	<u>26.5</u>	<u>16.2</u>	<u>23.5</u>	<u>-</u>
Junior College	61	26.2	9.8	-	26.3	18.0	19.7	-
Technical Institute	7	14.3	-	-	28.6	-	57.1	-
CERTIFICATE	29	13.8	31.0	3.5	17.2	3.5	27.6	3.4
<u>Total Males</u>	<u>23</u>	<u>4.4</u>	<u>30.4</u>	<u>4.3</u>	<u>21.7</u>	<u>4.4</u>	<u>30.4</u>	<u>4.4</u>
Junior College	5	20.0	-	20.0	40.0	-	20.0	-
Technical Institute	9	-	11.1	-	33.3	11.1	44.5	-
Voc-Tech Center	9	-	66.7	-	-	-	22.2	11.1
<u>Total Females</u>	<u>6</u>	<u>50.0</u>	<u>33.3</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>16.7</u>	<u>-</u>
Junior College	6	50.0	33.3	-	-	-	16.7	-
Voc-Tech Center	-	-	-	-	-	-	-	-

TABLE IV-15

MAJOR FIELD OF STUDY IN TWO-YEAR COLLEGE--1967 GRADUATES  
(In Percentages)

Student Status	N	Liberal Arts, Sciences	Business, Sales	Engineering	Trade, Industrial Occupations	Office, Secretarial Occupations	Education	Technical Occupations	Health Occupations	Agriculture
TOTAL	1,424	31.5	17.1	9.5	8.7	8.0	7.6	7.0	5.4	2.2
ASSOCIATE	1,156	38.1	18.0	8.8	2.7	7.5	8.9	6.2	4.9	1.6
Total Males	656	35.4	24.8	15.2	4.5	-	3.7	2.9	1.8	2.0
Junior College	567	40.7	24.5	12.8	3.7	-	4.3	7.8	2.1	1.6
Technical Institute	89	1.6	28.1	31.6	9.6	-	-	24.2	-	4.8
Total Females	500	42.0	9.2	0.4	0.1	17.5	15.6	1.4	8.2	1.2
Junior College	458	41.2	7.4	0.3	0.2	16.4	15.6	0.6	7.6	0.6
Technical Institute	42	5.1	28.0	-	-	30.5	-	3.5	20.3	7.7
CERTIFICATE	268	3.4	11.2	12.3	35.4	10.4	1.9	10.2	7.8	4.9
Total Males	191	3.3	12.6	17.3	45.2	-	2.1	14.4	0.4	2.1
Junior College	82	7.7	18.4	10.5	36.0	-	5.3	12.9	0.9	2.6
Technical Institute	49	-	1.1	8.7	59.8	-	-	28.0	-	4.4
Voc-Tech Center	60	-	12.8	32.7	47.3	-	-	6.8	-	-
Total Females	77	1.4	7.8	-	2.2	36.4	1.3	1.2	26.0	11.1
Junior College	40	7.7	-	-	6.5	27.9	1.8	-	44.6	55.4
Voc-Tech Center	37	-	16.1	-	14.6	46.7	-	2.9	5.0	14.6

<sup>a</sup>Includes 6 (0.4%) of Home Economics Majors.

TABLE IV-16  
GRADE POINT AVERAGE IN TWO-YEAR COLLEGE--1967 GRADUATES  
(In Percentages)

	N	A or A+ 93+	A- 90-92	B+ 87-89	B 83-86	B- 80-83	C+ 77-79	C 70-76	D 65-69	Median
TOTAL	1,417	4.0	11.0	15.2	21.7	19.0	19.5	9.8	0.1	B
ASSOCIATE	1,154	4.2	8.8	13.9	19.8	20.9	21.9	10.4	-	B-
Total Males	654	2.9	6.3	11.9	18.5	20.9	25.7	13.8	-	B-
Junior College	565	3.1	5.8	12.1	15.5	22.5	25.7	15.3	-	B-
Technical Institute	89	2.4	9.0	11.2	36.5	11.5	26.1	3.2	-	B
Total Females	500	6.0	12.2	16.4	21.6	20.8	17.0	6.0	-	B
Junior College	458	5.9	10.2	16.8	22.0	21.9	17.1	6.2	-	B
Technical Institute	42	6.4	33.1	11.9	16.9	10.2	16.5	5.1	-	B+
CERTIFICATE	263	3.0	20.5	21.2	28.1	10.6	9.1	7.2	0.8	B
Total Males	186	2.1	25.2	21.5	23.1	9.1	10.2	9.1	1.0	B
Junior College	79	1.4	16.3	12.1	22.3	11.4	14.1	19.8	2.7	B
Technical Institute	47	1.5	25.2	28.8	28.6	11.8	2.4	1.7	-	B+
Voc-Tech Center	60	2.7	36.1	26.4	20.1	3.8	10.9	-	-	B+
Total Females	77	5.2	9.1	20.8	40.3	14.3	6.5	2.6	-	B
Junior College	40	1.8	1.8	21.2	42.0	16.1	5.9	4.5	-	B
Voc-Tech Center	37	7.8	16.6	21.9	38.1	14.6	-	-	-	B



TABLE IV-17

**"EXCELLENT" RATING OF TWO-YEAR COLLEGE--1967 GRADUATES**  
(Per cent Rating Item as Excellent)

Student Status and Sex	Quality of Instruction	Academic Counseling	Job or Career Counseling	Student Participation in School Governance	Student Activities	Congeniality of Student Body	Job Placement Service	Intellectual Atmosphere	School Reputation	Availability of Teachers Outside Class Room Hours	Student Teacher Relations
<b>TOTAL<sup>a</sup></b>	47.5	22.8	19.2	14.0	23.6	37.7	29.0	17.2	52.9	49.4	53.8
<b>ASSOCIATE</b>											
<b>Total Males</b>	50.1	23.0	18.2	13.1	25.4	39.6	27.7	17.8	52.1	52.0	56.0
Junior College	46.6	17.4	13.1	13.1	45.2	36.8	25.7	17.8	51.5	47.9	53.4
Technical Institute	47.7	17.1	9.7	12.5	24.4	37.2	23.0	17.4	51.5	49.4	54.4
	39.3	1.9	27.7	16.7	28.1	34.1	34.1	20.2	51.2	38.6	46.6
<b>Total Females</b>	54.9	30.5	24.9	13.1	26.0	43.3	30.6	17.8	53.0	57.4	59.6
Junior College	55.3	30.3	23.5	14.1	26.5	43.2	25.8	19.0	50.3	57.9	58.9
Technical Institute	50.0	33.3	36.1	3.2	22.0	45.2	55.2	4.8	81.0	52.4	66.7
<b>CERTIFICATE</b>											
<b>Total Males</b>	36.2	21.4	22.8	18.8	13.0	28.6	33.1	14.2	56.7	35.7	43.7
Junior College	40.2	24.3	23.2	18.8	15.9	29.3	34.3	17.1	50.8	39.2	49.2
Technical Institute	32.9	16.9	15.5	11.1	16.7	29.7	39.1	13.5	57.3	32.9	46.1
Voc-Tech Center	36.7	18.2	22.9	22.6	3.7	30.2	50.0	20.4	57.1	50.0	56.3
	52.5	41.9	32.7	29.6	25.0	28.0	35.6	19.0	37.3	39.6	47.5
<b>Total Females</b>	26.0	11.4	21.6	18.9	6.1	26.6	29.5	6.1	82.9	22.0	30.0
Junior College	45.9	12.5	17.9	13.3	15.0	23.5	23.8	8.6	47.2	28.6	40.0
Voc-Tech Center	5.6	8.3	26.1	22.7	-	30.0	34.8	3.2	47.2	7.7	19.4

<sup>a</sup>All no answers, "have no experience with that," and "does not exist" answers were excluded from the base on which each per cent was calculated; therefore the number of respondents varies for each item. The percentage rating the item (excellent, satisfactory, or poor) ranges from 53 per cent for job placement to 98 per cent for quality of instruction.

TABLE IV-18

FEELINGS ABOUT TWO-YEAR COLLEGE EDUCATION--1967 GRADUATES  
(In Percentages)

	Gave New Ideas About Work	Wasted Time and Delayed Career	Training and Education Helpful in Work	Little Effect on Career	Important Con- tribution to General Education	Provided Education and Training Other- wise Could Not Have Afforded	More Likely to be Considered for Responsible Job	Counseling Enabled Continued Education	Counseling Enabled Finding Job
<b>TOTAL<sup>a</sup></b>	35.4	1.5	58.4	5.7	75.8	57.5	54.9	18.3	18.1
<b>ASSOCIATE</b>	33.3	1.3	55.3	5.2	77.2	55.9	51.2	19.3	13.2
<b>Total Males</b>	32.6	1.1	48.8	6.0	72.2	54.7	50.2	16.3	12.3
Junior College	30.3	1.1	45.6	6.7	71.6	53.5	46.0	15.5	8.7
Technical Institute	47.2	1.1	68.5	1.1	76.1	51.1	76.4	21.3	34.8
<b>Total Females</b>	34.1	1.6	63.9	4.4	83.8	57.5	52.5	23.2	14.5
Junior College	33.6	1.8	62.0	4.8	83.4	58.9	50.8	24.0	11.9
Technical Institute	40.5	-	85.4	-	88.1	42.9	71.4	14.3	42.9
<b>CERTIFICATE</b>	44.5	2.3	72.0	7.6	69.4	64.4	70.9	14.1	39.5
<b>Total Males</b>	50.3	1.6	68.6	8.6	74.6	64.2	72.3	15.6	38.2
Junior College	41.4	3.7	56.8	8.5	76.8	64.2	66.7	15.0	27.5
Technical Institute	48.9	-	85.1	-	72.3	63.0	78.7	15.2	54.3
Voc-Tech Center	63.3	-	71.7	15.0	73.3	65.0	75.0	16.7	40.0
<b>Total Females</b>	30.3	3.9	80.3	5.2	56.6	64.9	67.5	10.4	42.7
Junior College	32.5	7.5	80.0	7.5	75.0	52.5	70.0	15.0	48.7
Voc-Tech Center	27.8	-	80.6	2.7	36.1	78.4	64.9	5.4	36.1

<sup>a</sup>Table does not present complete distribution of answers. Only those who "agree strongly" with the statement are shown as a per cent of total respondents.

TABLE IV-19

MAJOR PROBLEMS INTERFERING WITH EDUCATIONAL ACHIEVEMENT--1967 GRADUATES  
(In Percentages)<sup>a</sup>

	N	Inadequate High School Preparation	Job Took Too Much Time	Worry Over Finances	Had Poor Study Habits	Many Courses Were Wasted of Time
TOTAL	1,187 <sup>b</sup>	15.9	9.4	7.8	23.5	11.5
ASSOCIATE	983	16.9	8.6	6.7	23.4	12.4
Total Males	569	20.0	10.5	7.7	26.2	9.8
Junior College Technical Institute	496 73	20.9 13.5	11.2 5.9	7.7 8.8	26.9 27.1	8.9 16.9
Total Females	414	12.6	6.0	5.3	18.6	15.9
Junior College Technical Institute	379 35	12.9 8.1	6.5 -	4.6 14.2	17.3 30.4	15.8 17.1
CERTIFICATE	204	11.3	12.7	12.7	24.0	7.4
Total Males	147	14.7	12.2	17.0	23.8	4.8
Junior College Technical Institute Voc-Tech Center	65 32 50	11.1 10.6 23.9	13.3 16.7 7.3	12.7 26.6 15.8	26.8 11.0 28.3	11.4 - -
Total Females	57	1.8	14.0	1.8	24.6	14.0
Junior College Voc-Tech Center	31 26	2.3 -	6.9 21.7	2.3 -	25.3 22.4	5.6 25.1

<sup>a</sup>Only problems listed as "major problems" by 5 per cent or more of the total respondents are shown (i.e., 5 out of 13 items listed in the questionnaire); totals therefore add to less than 100.

<sup>b</sup>The base (1,187) does not include 237 (16.6%) nonrespondents to this question.

TABLE IV-20

EXTENT OF DIFFICULTY RESPONDENT MET IN FINANCING TWO-YEAR COLLEGE--  
1967 GRADUATES  
(In Percentages)

	N	No Difficulty	Some Difficulty	Very Difficult
TOTAL	1,421	65.6	29.3	4.9
ASSOCIATE	1,155	65.1	29.6	5.1
<u>Total Males</u>	<u>656</u>	<u>62.2</u>	<u>32.6</u>	<u>5.2</u>
Junior College	567	62.5	31.9	5.6
Technical Institute	89	60.9	36.7	2.4
<u>Total Females</u>	<u>499</u>	<u>68.9</u>	<u>25.7</u>	<u>5.0</u>
Junior College	457	70.0	24.1	5.5
Technical Institute	42	57.6	42.4	-
CERTIFICATE	266	67.7	28.2	3.8
<u>Total Males</u>	<u>189</u>	<u>65.6</u>	<u>30.2</u>	<u>4.2</u>
Junior College	82	53.5	38.6	7.9
Technical Institute	47	74.7	20.7	4.6
Voc-Tech Center	60	74.3	25.1	-
<u>Total Females</u>	<u>77</u>	<u>72.7</u>	<u>23.4</u>	<u>2.6</u>
Junior College	40	73.9	18.9	5.4
Voc-Tech Center	37	72.6	26.9	-

TABLE IV-21

FIRST ACTIVITY AFTER GRADUATION--1967 GRADUATES  
(In Percentages)

	N	Sought Work, But Was Unemployed	Full-Time Job	Full-Time School or College	Military Service	Part-Time School and Part-Time Job	Part-Time Job	Full-Time Housewife
TOTAL	1,424	2.7	40.1	43.1	3.6	5.7	1.8	1.4
ASSOCIATE	1,156	1.8	33.5	50.2	3.0	6.5	1.9	1.5
Total Males	656	1.6	30.3	51.9	5.5	7.2	1.9	-
Junior College	567	1.7	23.2	57.2	6.0	8.2	1.9	-
Technical Institute	89	1.6	70.1	22.9	1.3	1.6	2.4	-
Total Females	500	2.0	38.4	47.0	-	5.6	1.8	3.4
Junior College	458	2.0	33.2	51.3	-	6.2	2.0	3.8
Technical Institute	42	2.4	93.6	-	-	-	-	-
CERTIFICATE	268	6.7	68.6	12.7	6.0	2.2	1.1	1.1
Total Males	191	5.0	65.9	16.1	8.1	3.2	0.6	-
Junior College	82	-	54.0	26.0	9.4	7.5	0.9	-
Technical Institute	49	1.1	90.9	6.2	1.8	-	-	-
Voc-Tech Center	60	15.0	61.2	11.3	11.1	-	-	-
Total Females	77	9.6	77.9	4.0	-	-	3.4	2.8
Junior College	40	3.6	76.1	8.1	-	-	1.8	5.0
Voc-Tech Center	37	18.9	78.4	-	-	-	-	2.7

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TABLE IV-22

CURRENT STATUS (1969) -- 1967 GRADUATES  
(In Percentages)

	N	Unemployed	Full-Time Job	Full-Time School or College	Military Service	Part-Time School and Part-Time Job	Part-Time Job	Full-Time Housewife
TOTAL	1,424	3.4	48.6	28.4	7.0	5.8	1.3	3.8
ASSOCIATE	1,156	3.8	43.8	33.8	5.3	6.3	1.6	3.5
<u>Total Males</u>	<u>656</u>	<u>2.1</u>	<u>42.8</u>	<u>36.7</u>	<u>9.1</u>	<u>7.3</u>	<u>0.4</u>	<u>-</u>
Junior College	567	2.6	38.8	40.7	7.8	8.4	0.5	-
Technical Institute	89	-	67.7	10.9	18.1	0.8	-	-
<u>Total Females</u>	<u>500</u>	<u>5.8</u>	<u>44.6</u>	<u>30.8</u>	<u>-</u>	<u>4.8</u>	<u>3.0</u>	<u>8.2</u>
Junior College	458	6.3	40.1	33.7	-	5.5	3.4	8.2
Technical Institute	42	-	91.9	-	-	-	-	8.1
CERTIFICATE	268	2.2	70.1	3.4	14.3	4.1	0.4	4.8
<u>Total Males</u>	<u>191</u>	<u>2.1</u>	<u>68.2</u>	<u>3.8</u>	<u>21.0</u>	<u>5.2</u>	<u>-</u>	<u>-</u>
Junior College	82	-	62.1	8.2	24.8	4.8	-	-
Technical Institute	49	5.1	82.5	-	11.7	-	-	-
Voc-Tech Center	60	1.8	64.4	-	23.4	10.1	-	-
<u>Total Females</u>	<u>77</u>	<u>2.6</u>	<u>75.3</u>	<u>2.6</u>	<u>-</u>	<u>1.3</u>	<u>1.3</u>	<u>16.9</u>
Junior College	40	2.5	70.0	5.0	-	2.5	2.5	17.5
Voc-Tech Center	37	2.7	81.1	-	-	-	-	16.2

TABLE IV-23

SOME FULL-TIME WORK EXPERIENCE SINCE GRADUATION--1967 GRADUATES  
(In Percentages)

	N	Yes	No
TOTAL	1,424	63.1	36.9
ASSOCIATE	1,156	56.8	43.2
<u>Total Males</u>	<u>656</u>	<u>57.0</u>	<u>43.0</u>
Junior College	567	51.9	48.1
Technical Institute	89	89.4	10.6
<u>Total Females</u>	<u>500</u>	<u>56.4</u>	<u>43.6</u>
Junior College	458	52.5	47.4
Technical Institute	42	100.0	-
CERTIFICATE	268	90.7	9.3
<u>Total Males</u>	<u>191</u>	<u>89.0</u>	<u>11.0</u>
Junior College	82	83.3	16.7
Technical Institute	49	98.2	1.8
Voc-Tech Center	60	90.0	10.0
<u>Total Females</u>	<u>77</u>	<u>94.8</u>	<u>5.2</u>
Junior College	40	91.0	9.0
Voc-Tech Center	37	100.0	-

TABLE IV-24

TYPE OF FIRST FULL-TIME JOB HELD BY 1967 GRADUATES  
(In Percentages)

	N	Business, Sales, Data Processing	Trade, Industrial Occupations	Engineering, Engineering Technology	Health Occupations	Agriculture, Food Trades, Home Economics	Liberal Arts, Sciences	Education	Protective Services	Other
TOTAL	897	40.4	24.3	15.8	8.7	3.0	2.9	2.1	1.2	1.2
ASSOCIATE	644	47.7	17.1	14.9	7.6	2.6	4.0	2.6	1.6	1.7
Total Males	366	30.7	26.6	25.2	2.6	3.3	4.7	1.6	2.7	2.5
Junior College	287	31.1	30.6	19.9	3.1	3.0	4.1	1.7	3.4	3.1
Technical Institute	79	28.8	12.2	44.5	-	3.6	8.2	2.7	-	-
Total Females	278	70.1	4.4	1.4	14.4	1.8	3.2	4.0	-	0.7
Junior College	236	71.5	4.5	1.9	12.1	6.2	3.0	4.8	-	0.8
Technical Institute	42	62.3	3.9	-	25.4	-	3.4	-	-	-
CERTIFICATE	253	22.1	42.7	18.2	11.5	4.0	-	0.8	0.4	-
Total Males	167	11.4	53.3	27.5	1.2	4.8	-	1.2	0.6	-
Junior College	65	24.2	43.5	16.4	1.1	9.4	-	3.3	2.2	-
Technical Institute	48	1.6	47.5	48.6	1.5	-	-	-	-	-
Voc-Tech Center	54	6.0	67.3	22.8	-	4.0	-	-	-	-
Total Females	86	42.1	22.1	-	31.4	2.3	-	-	-	-
Junior College	36	36.7	9.3	-	48.0	6.0	-	-	-	-
Technical Institute	14	36.4	-	-	60.4	-	-	-	-	-
Voc-Tech Center	36	49.7	44.7	-	5.6	-	-	-	-	-

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TABLE IV-25  
EMPLOYMENT SOURCES FOR FIRST JOB--1967 GRADUATES  
(In Percentages)

	N	On My Own	Private or State Employment Agency	Through Parent, Friend or Relative	Already With Employer	Through School or Instructor
TOTAL	896	38.3	7.0	11.9	23.5	19.2
ASSOCIATE	654	40.0	6.0	12.3	22.0	19.7
<u>Total Males</u>	<u>373</u>	<u>34.1</u>	<u>5.7</u>	<u>14.5</u>	<u>25.2</u>	<u>20.3</u>
Junior College	293	33.4	6.7	15.2	28.3	16.3
Technical Institute	80	39.6	2.7	13.1	14.4	30.4
<u>Total Females</u>	<u>281</u>	<u>47.9</u>	<u>6.4</u>	<u>9.4</u>	<u>17.7</u>	<u>18.5</u>
Junior College	239	49.0	6.4	9.0	19.9	15.6
Technical Institute	42	41.5	6.8	11.5	5.1	35.2
CERTIFICATE	242	32.6	9.5	10.3	27.7	19.8
<u>Total Males</u>	<u>170</u>	<u>33.5</u>	<u>4.4</u>	<u>10.4</u>	<u>33.7</u>	<u>18.1</u>
Junior College	68	51.1	3.2	6.8	27.3	11.6
Technical Institute	48	5.5	-	3.5	69.8	21.2
Voc-Tech Center	54	36.4	10.0	21.2	10.5	21.9
<u>Total Females</u>	<u>72</u>	<u>29.2</u>	<u>22.2</u>	<u>11.1</u>	<u>13.9</u>	<u>23.6</u>
Junior College	36	37.3	9.8	7.5	21.8	23.8
Voc-Tech Center	36	22.0	31.3	14.9	7.9	23.9

TABLE IV-26

UNEMPLOYMENT EXPERIENCE SINCE GRADUATING IN JUNE 1967<sup>a</sup>  
(In Percentages)

		Unemployment Since Graduation in 1967 <sup>b</sup>				
	N	None	Months			
			Less Than 1	1-4	5-8	9 and More
TOTAL	1,361	83.8	2.4	11.8	1.4	0.6
ASSOCIATE	1,107	85.6	1.5	10.7	1.3	0.8
<u>Total Males</u>	<u>636</u>	<u>87.7</u>	<u>1.4</u>	<u>10.2</u>	<u>0.3</u>	<u>0.3</u>
Junior College	547	88.2	0.8	10.3	0.4	0.3
Technical Institute	89	84.3	5.6	10.0	-	-
<u>Total Females</u>	<u>471</u>	<u>82.8</u>	<u>1.7</u>	<u>11.5</u>	<u>2.5</u>	<u>1.5</u>
Junior College	429	83.4	1.4	11.0	2.6	1.6
Technical Institute	42	75.9	5.2	17.2	1.7	-
CERTIFICATE	254	76.0	5.9	16.1	2.0	-
<u>Total Males</u>	<u>180</u>	<u>82.2</u>	<u>4.4</u>	<u>11.7</u>	<u>1.7</u>	<u>-</u>
Junior College	73	90.6	2.5	6.9	-	-
Technical Institute	48	87.5	2.1	10.4	-	-
Voc-Tech Center	59	68.4	9.1	18.8	3.7	-
<u>Total Females</u>	<u>74</u>	<u>60.8</u>	<u>9.4</u>	<u>27.0</u>	<u>2.7</u>	<u>-</u>
Junior College	37	70.2	5.8	20.2	3.9	-
Voc-Tech Center	37	51.7	14.6	31.7	2.0	-

<sup>a</sup>This table reflects the answers to the following question: "Since June 1967 have you ever experienced a period of time when you were unemployed and actively seeking a job?"

<sup>b</sup>The median period at unemployment for those having experienced any unemployment was 1.9 months.

TABLE-IV-27

REASONS NOT AVAILABLE FOR WORK FOR ANY PERIOD BETWEEN GRADUATION  
AND TIME OF SURVEY (1969)--1967 GRADUATES  
(In Percentages)

	N	Military Service	Full-Time School	Illness/ Disability	Full-Time Housewife
TOTAL <sup>a</sup>	798	19.4	71.6	5.1	6.4
ASSOCIATE	692	12.4	79.6	4.0	6.6
<u>Total Males</u>	<u>393</u>	<u>15.8</u>	<u>79.6</u>	<u>1.8</u>	<u>0.4</u>
Junior College	360	17.2	84.8	1.2	0.4
Technical Institute	33	68.8	23.1	10.3	-
<u>Total Females</u>	<u>299</u>	<u>0.4</u>	<u>79.6</u>	<u>7.0</u>	<u>14.8</u>
Junior College	299	0.4	79.6	7.0	14.8
Technical Institute	-	-	-	-	-
CERTIFICATE	106	65.1	18.9	12.3	4.7
<u>Total Males</u>	<u>90</u>	<u>78.2</u>	<u>17.8</u>	<u>7.8</u>	<u>-</u>
Junior College	46	68.3	34.1	4.7	-
Technical Institute	16	71.7	-	26.1	-
Voc-Tech Center	28	93.7	-	5.0	-
<u>Total Females</u>	<u>16</u>	<u>-</u>	<u>24.9</u>	<u>38.9</u>	<u>34.4</u>
Junior College	16	-	24.9	38.9	34.4
Voc-Tech Center	-	-	-	-	-

<sup>a</sup>Since respondents could check more than one item, the total percentages can exceed 100%.

TABLE IV-28

STARTING HOURLY WAGE RATES ON FIRST FULL-TIME JOB AFTER GRADUATION--1967 GRADUATES  
(In Percentages)

	N	Under \$1.60	\$1.60- \$1.99	\$2.00- \$2.49	\$2.50- \$2.99	\$3.00- \$3.99	\$4.00 and Over
TOTAL	836	16.6	19.6	26.7	16.7	15.3	5.0
ASSOCIATE	622	12.7	17.4	27.6	16.7	19.1	6.4
<u>Total Males</u>	<u>352</u>	<u>11.1</u>	<u>11.1</u>	<u>23.2</u>	<u>18.3</u>	<u>26.8</u>	<u>9.4</u>
Junior College	281	13.1	10.4	24.4	17.1	24.4	10.6
Technical Institute	71	3.0	13.2	19.7	22.4	35.8	5.9
<u>Total Females</u>	<u>270</u>	<u>14.8</u>	<u>25.2</u>	<u>33.3</u>	<u>14.8</u>	<u>9.6</u>	<u>2.2</u>
Junior College	231	14.1	23.5	36.0	14.1	9.6	2.7
Technical Institute	39	19.8	34.6	18.0	18.4	9.2	-
CERTIFICATE	214	28.0	26.2	23.8	16.8	4.2	0.9
<u>Total Males</u>	<u>157</u>	<u>22.3</u>	<u>24.2</u>	<u>26.1</u>	<u>21.1</u>	<u>5.7</u>	<u>0.6</u>
Junior College	62	25.8	15.5	26.5	21.1	9.8	1.2
Technical Institute	47	15.9	13.8	28.5	38.1	3.8	-
Voc-Tech Center	48	25.0	43.8	22.9	6.2	2.1	-
<u>Total Females</u>	<u>57</u>	<u>43.8</u>	<u>31.6</u>	<u>17.5</u>	<u>5.3</u>	<u>-</u>	<u>1.8</u>
Junior College	32	23.9	36.2	28.5	6.8	-	4.6
Voc-Tech Center	25	68.7	24.2	2.8	4.3	-	-

TABLE IV-29  
WAGE RATE INCREMENTS--1967 GRADUATES <sup>a</sup>

	Mean Wages		Mean Difference		Median Wages		Median Difference	
	First Job	Current Job	\$	%	First Job	Current Job	\$	%
TOTAL	2.31	2.82	.51	22.1	2.26	2.74	.48	21.2
ASSOCIATE	2.46	2.93	.47	19.1	2.36	2.86	.50	21.2
<u>Total Males</u>	<u>2.68</u>	<u>3.21</u>	<u>.53</u>	<u>19.8</u>	<u>2.62</u>	<u>3.22</u>	<u>.60</u>	<u>22.9</u>
Junior College	2.64	3.20	.56	21.2	2.56	3.19	.63	24.6
Technical Institute	2.83	3.24	.41	14.5	2.80	3.28	.48	17.1
<u>Total Females</u>	<u>2.17</u>	<u>2.57</u>	<u>.40</u>	<u>18.4</u>	<u>2.15</u>	<u>2.54</u>	<u>.39</u>	<u>18.1</u>
Junior College	2.19	2.61	.42	19.2	2.17	2.56	.39	18.0
Technical Institute	2.02	2.35	.33	16.3	1.95	2.38	.43	22.1
CERTIFICATE	1.88	2.48	.60	31.9	1.94	2.41	.47	24.2
<u>Total Males</u>	<u>2.01</u>	<u>2.58</u>	<u>.57</u>	<u>28.4</u>	<u>2.07</u>	<u>2.56</u>	<u>.49</u>	<u>23.7</u>
Junior College	2.09	2.63	.54	25.8	2.18	2.69	.51	23.4
Technical Institute	2.17	2.85	.68	31.3	2.33	2.79	.46	19.7
Voc-Tech Center	1.75	2.23	.48	27.4	1.83	2.19	.36	19.7
<u>Total Females</u>	<u>1.54</u>	<u>2.17</u>	<u>.63</u>	<u>40.9</u>	<u>1.68</u>	<u>2.00</u>	<u>.32</u>	<u>19.0</u>
Junior College	1.82	2.28	.46	25.3	1.87	2.25	.38	20.3
Voc-Tech Center	1.18	2.00	.82	69.5	1.18	1.87	.69	58.5

<sup>a</sup>Wage rate increments are based on respondents (836) same as in Table IV-28.

TABLE IV-30

CURRENT (1969) HOURLY WAGE RATES--1967 GRADUATES  
(In Percentages)

	N	Under \$1.60	\$1.60- \$1.99	\$2.00- \$2.49	\$2.50- \$2.99	\$3.00- \$3.99	\$4.00 and Over
TOTAL	817	5.4	14.4	19.7	21.7	27.2	11.6
ASSOCIATE	611	5.1	10.6	19.0	21.1	29.8	14.4
<u>Total Males</u>	<u>345</u>	<u>3.5</u>	<u>4.9</u>	<u>16.2</u>	<u>17.7</u>	<u>35.6</u>	<u>22.0</u>
Junior College	277	4.2	5.1	16.4	17.9	31.6	24.8
Technical Institute	68	-	4.2	14.8	15.6	53.1	12.3
<u>Total Females</u>	<u>266</u>	<u>7.1</u>	<u>18.0</u>	<u>22.6</u>	<u>25.6</u>	<u>22.2</u>	<u>4.5</u>
Junior College	227	6.0	16.9	23.8	25.8	22.2	5.4
Technical Institute	39	12.4	25.8	16.1	23.5	22.1	-
CERTIFICATE	206	6.3	25.7	21.8	23.3	19.4	3.4
<u>Total Males</u>	<u>156</u>	<u>7.0</u>	<u>19.2</u>	<u>20.5</u>	<u>25.0</u>	<u>24.4</u>	<u>3.8</u>
Junior College	63	12.0	12.5	17.6	19.4	34.0	4.6
Technical Institute	47	-	17.5	10.7	38.9	27.3	5.7
Voc-Tech Center	46	7.0	29.4	34.6	19.6	9.4	-
<u>Total Females</u>	<u>50</u>	<u>4.0</u>	<u>46.0</u>	<u>26.0</u>	<u>18.0</u>	<u>4.0</u>	<u>2.0</u>
Junior College	30	6.1	24.3	34.6	25.3	4.9	4.9
Voc-Tech Center	20	-	76.7	15.7	2.8	5.5	-

TABLE IV-31  
DEGREES RECEIVED SINCE GRADUATION--1967 GRADUATES  
(In Percentages)

	N	None	Bachelor Degree	Certificate	Other
TOTAL	1,035	57.4	33.8	13.2	0.3
ASSOCIATE	906	58.1	37.7	10.2	0.1
<u>Total Males</u>	<u>547</u>	<u>64.4</u>	<u>30.9</u>	<u>5.7</u>	<u>0.2</u>
Junior College	499	63.2	32.9	5.1	0.3
Technical Institute	48	76.9	10.6	12.6	-
<u>Total Females</u>	<u>359</u>	<u>48.4</u>	<u>48.1</u>	<u>16.9</u>	<u>-</u>
Junior College	348	47.8	49.9	16.8	-
Technical Institute	11	75.8	-	24.2	-
CERTIFICATE	129	53.5	6.2	34.9	1.6
<u>Total Males</u>	<u>104</u>	<u>54.7</u>	<u>6.7</u>	<u>32.2</u>	<u>1.9</u>
Junior College	53	56.7	13.4	28.5	1.2
Technical Institute	24	44.7	-	53.0	1.4
Voc-Tech Center	27	59.1	-	21.0	-
<u>Total Females</u>	<u>25</u>	<u>48.0</u>	<u>4.0</u>	<u>44.0</u>	<u>-</u>
Junior College	13	51.4	11.4	37.1	-
Voc-Tech Center	12	51.4	-	48.6	-

TABLE IV-32  
ADDITIONAL EDUCATION--1967 GRADUATES  
(In Percentages)

	N	No	Yes	
			Full-Time	Part-Time
TOTAL	1,424	27.2	53.6	19.1
ASSOCIATE	1,156	21.6	60.8	17.6
<u>Total Males</u>	<u>656</u>	<u>16.6</u>	<u>65.1</u>	<u>18.1</u>
Junior College	567	11.8	71.4	16.4
Technical Institute	89	46.8	24.2	29.0
<u>Total Females</u>	<u>500</u>	<u>28.2</u>	<u>55.2</u>	<u>16.8</u>
Junior College	458	24.0	60.2	15.8
Technical Institute	42	73.7	1.3	25.0
CERTIFICATE	268	51.1	22.4	25.7
<u>Total Males</u>	<u>191</u>	<u>45.0</u>	<u>27.2</u>	<u>27.7</u>
Junior College	82	35.8	37.4	28.8
Technical Institute	49	51.9	3.3	44.8
Voc-Tech Center	60	51.5	30.8	14.1
<u>Total Females</u>	<u>77</u>	<u>66.2</u>	<u>10.4</u>	<u>20.8</u>
Junior College	40	66.7	18.0	13.5
Voc-Tech Center	37	66.4	2.4	30.8



TABLE IV-33

TYPE OF FURTHER EDUCATION--1967 GRADUATES<sup>a</sup>  
(In Percentages)

	N	Four Year College	Adult Education Course	Correspondence Course	MDTA or Work Training Program	Apprentice Program	Business, Commerce School	Trade, Technical School	Other
TOTAL	1,035	78.9	7.1	3.8	1.4	4.9	2.1	5.1	2.3
ASSOCIATE	906	86.8	6.8	3.0	1.2	2.8	1.0	2.0	2.0
<u>Total Males</u>	<u>547</u>	<u>86.8</u>	<u>4.5</u>	<u>2.4</u>	<u>1.8</u>	<u>3.5</u>	<u>0.9</u>	<u>2.7</u>	<u>0.4</u>
Junior College	499	89.6	4.4	2.4	0.9	3.1	1.1	1.4	0.5
Technical Institute	48	59.7	6.0	2.0	10.6	5.7	-	16.0	-
<u>Total Females</u>	<u>359</u>	<u>86.6</u>	<u>10.3</u>	<u>3.9</u>	<u>0.3</u>	<u>1.7</u>	<u>1.1</u>	<u>0.8</u>	<u>4.5</u>
Junior College	348	88.6	9.8	3.6	0.3	1.5	1.1	0.9	4.6
Technical Institute	11	30.7	24.2	19.3	-	6.5	-	-	-
CERTIFICATE	129	24.0	8.5	9.3	2.3	20.2	10.1	27.1	6.2
<u>Total Males</u>	<u>104</u>	<u>26.0</u>	<u>4.8</u>	<u>11.5</u>	<u>1.9</u>	<u>24.0</u>	<u>6.2</u>	<u>26.9</u>	<u>4.8</u>
Junior College	53	44.0	6.9	13.5	1.4	27.3	-	20.5	-
Technical Institute	24	12.9	-	18.2	-	43.2	-	33.3	-
Voc-Tech Center	27	2.7	4.0	4.4	4.0	4.4	27.8	32.9	19.9
<u>Total Females</u>	<u>25</u>	<u>16.0</u>	<u>24.0</u>	<u>-</u>	<u>4.0</u>	<u>4.0</u>	<u>20.0</u>	<u>28.0</u>	<u>12.0</u>
Junior College	13	34.3	5.7	-	5.7	5.7	34.2	11.4	25.7
Voc-Tech Center	12	-	44.7	-	-	-	5.9	45.7	-

<sup>a</sup>This table is limited to graduates who sought further education as established in Table IV-32.

TABLE IV-34

CREDITS ACCEPTED BY FOUR-YEAR COLLEGE--1967 GRADUATES  
(In Percentages)

	N	All Credits Accepted	Number of Credits Lost				
			1-6	7-12	13-18	19-30	31 or More
TOTAL	808	49.7	28.8	7.9	5.6	3.2	4.9
ASSOCIATE	775	49.2	29.0	8.1	5.2	3.3	4.9
Total Males	470	45.5	28.5	8.7	5.5	4.2	7.2
Junior College	447	47.3	29.7	8.8	5.4	4.1	4.7
Technical Institute	23	12.3	3.1	9.2	9.2	9.2	57.1
Total Females	305	55.0	29.8	7.2	4.9	1.9	1.3
Junior College	302	54.8	29.9	7.4	4.9	1.9	1.0
Technical Institute	3	63.0	-	-	-	-	37.0
CERTIFICATE	33	60.6	24.2	3.0	15.1	-	6.0
Total Males	29	58.6	24.1	3.4	13.7	-	3.4
Junior College	23	48.2	29.6	2.3	15.2	-	4.7
Technical Institute	-	-	-	-	-	-	-
Voc-Tech Center	6	100.0	-	-	-	-	-
Total Females	4	50.0	16.7	-	16.7	-	16.7
Junior College	4	50.0	16.7	-	16.7	-	16.7
Voc-Tech Center	-	-	-	-	-	-	-

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TABLE IV-35  
MAJOR REASON FOR FURTHER EDUCATION--1967 GRADUATES  
(In Percentages)

	N	Further My Education	For New Career	Advance Career	Obtain Degree
TOTAL	1,030	22.9	12.5	36.8	27.4
ASSOCIATE	904	23.6	11.6	34.2	30.1
<u>Total Males</u>	<u>545</u>	<u>20.9</u>	<u>12.7</u>	<u>36.7</u>	<u>29.7</u>
Junior College	497	21.9	12.8	34.8	30.5
Technical Institute	48	10.4	10.4	56.9	22.6
<u>Total Females</u>	<u>359</u>	<u>28.7</u>	<u>10.0</u>	<u>30.4</u>	<u>30.6</u>
Junior College	348	29.2	9.7	29.7	31.4
Technical Institute	11	19.3	19.3	56.5	4.9
CERTIFICATE	126	18.3	19.0	55.6	7.9
<u>Total Males</u>	<u>101</u>	<u>21.8</u>	<u>21.8</u>	<u>50.5</u>	<u>6.9</u>
Junior College	52	22.2	24.6	41.5	11.6
Technical Institute	22	20.0	8.4	71.7	-
Voc-Tech Center	27	21.9	25.6	50.5	2.0
<u>Total Females</u>	<u>25</u>	<u>4.0</u>	<u>8.0</u>	<u>76.0</u>	<u>12.0</u>
Junior College	13	7.7	7.7	64.2	20.0
Voc-Tech Center	12	-	4.3	92.7	-

TABLE IV-36  
HIGHEST DEGREE INTENDED--1967 GRADUATES  
(In Percentages)

	N	None <sup>a</sup>	Certificate	A.A.	B.A.	M.A.	Ph.D.; Ed.D.	R.N.	Undecided	Other
TOTAL	1,424	24.3	2.5	3.4	27.3	29.4	5.8	0.2	1.4	2.1
ASSOCIATE	1,156	17.0	1.1	3.3	29.8	34.8	7.0	0.1	1.5	2.5
<u>Total Males</u>	<u>656</u>	<u>11.4</u>	<u>0.6</u>	<u>3.0</u>	<u>32.8</u>	<u>35.1</u>	<u>9.6</u>	<u>-</u>	<u>1.2</u>	<u>4.1</u>
Junior College	567	10.1	0.7	3.3	31.5	36.8	10.0	-	0.8	4.8
Technical Institute	89	20.5	-	0.8	39.8	23.9	6.4	-	0.8	-
<u>Total Females</u>	<u>500</u>	<u>24.4</u>	<u>1.8</u>	<u>3.8</u>	<u>26.0</u>	<u>34.6</u>	<u>3.6</u>	<u>0.2</u>	<u>1.8</u>	<u>0.4</u>
Junior College	458	21.9	1.5	3.6	26.0	37.2	4.0	0.2	2.0	0.4
Technical Institute	42	51.7	5.2	5.2	25.4	8.1	-	-	-	-
CERTIFICATE	268	55.6	8.2	3.7	16.4	5.5	0.7	0.7	1.1	0.4
<u>Total Males</u>	<u>191</u>	<u>47.1</u>	<u>10.9</u>	<u>2.6</u>	<u>21.5</u>	<u>6.3</u>	<u>1.0</u>	<u>0.5</u>	<u>1.5</u>	<u>0.5</u>
Junior College	82	28.5	10.5	3.5	28.3	14.8	0.7	0.7	2.2	0.7
Technical Institute	49	76.5	-	4.4	5.1	-	1.1	-	-	-
Voc-Tech Center	60	48.1	19.2	-	25.4	-	-	-	1.5	-
<u>Total Females</u>	<u>77</u>	<u>76.6</u>	<u>1.2</u>	<u>6.5</u>	<u>3.9</u>	<u>3.9</u>	<u>-</u>	<u>1.2</u>	<u>-</u>	<u>-</u>
Junior College	40	60.4	3.6	12.6	6.3	6.3	-	3.6	-	-
Voc-Tech Center	37	95.5	-	-	-	-	-	-	-	-

<sup>a</sup>Beyond those already obtained.

## V. FACULTY

The preceding sections have shown that differences existed in the institutional structures and student populations of two-year colleges with different educational philosophies. This section describes the characteristics of the faculty members.

The sampling design used in the study to obtain a representative faculty sample is described in detail in Appendix A. To summarize, a multi-stage sampling design was used whereby the universe of institutions was stratified by type of school, by enrollment size, and by geographic region, yielding cells with predetermined numbers of students. Institutions were then selected with probability proportionate to size, yielding an unweighted sample of students. The faculty sample was then drawn, based on a pre-fixed faculty-student ratio. However, insofar as the ratio of faculty to students was not constant in all schools, compensatory weights were subsequently applied to the responses obtained from the faculty.

Survey questionnaires were mailed to 4,122 faculty members who were teaching in the two-year colleges during the spring of 1969. The survey yielded a usable return rate of 58 per cent, which was a somewhat lower response rate than was desirable. A comparison of respondents and nonrespondents, however, revealed no significant differences between the two groups by type of school, by academic or occupational teaching assignment, or by sex. Thus the respondents appeared to be representative of two-year college faculty.<sup>1</sup>

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<sup>1</sup>See Appendix B for further discussion of nonrespondents study.

About two-thirds of the respondents were full-time faculty members; one-fifth were part-time; and the remainder were administrators or counselors. This latter group of nonteaching two-year college staff was excluded from most of the following discussions which are based on type of school comparing male and female full-time faculty members or comparing full-time and part-time members. Any other cross-tabulations by type of school produced too few frequencies and were excluded from the following analyses.

### Demographic Characteristics

#### Sex

The findings clearly indicated that the two-year college professional staff was a predominantly male population. Women constituted only one-fifth of the nonteaching staff and less than 30 per cent of the teaching staff.<sup>2</sup> However, the proportion of women faculty varied slightly by type of school and by subject area (see discussion on pp. 165-166) (see Figure V-1).

In general, vocational-technical centers appear to employ more women teachers than do other two-year institutions. Over one-third of

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<sup>2</sup>In his study of junior colleges, Medsker reported that 72 per cent of the respondents were men; an almost identical proportion (71.3%) was obtained from our respondents (Leland L. Medsker, The Junior College: Progress and Prospect. New York: McGraw-Hill, 1960, p. 171). Although teaching is still by far the most popular profession among women (e.g., noncollege teachers in April 1968 equaled 42 per cent of all professional women), The 1969 Handbook on Women Workers (Women's Bureau Bulletin 294, U. S. Department of Labor, 1969, pp. 95 ff) indicated that the number of women teaching at secondary and postsecondary levels has not increased as rapidly as has the number of men. According to their statistics, only 22 per cent of the faculty and other professional staff in institutions of higher education were women in 1964. To state it differently, one out of ten women teachers were teaching in higher education, two out of ten in secondary institutions, and the rest in elementary schools.

their full-time and half of their part-time faculty members were women. Technical institutes had slightly more women among their full-time than among their part-time teachers (one-fourth as compared to one-fifth). In junior colleges, women constituted approximately 30 per cent of both full-time and part-time faculty, while in the branch campuses there was a distinct tendency to employ more women for part-time positions (one-third) than for full-time (one-fifth).<sup>3</sup>

#### Minority Group Status

The findings also clearly indicated that both full-time and part-time faculty in two-year colleges were predominantly white. The small proportion of the faculty belonging to minority groups (approximately 5%) remained constant by type of school and sex, with the exception of vocational-technical centers, where 14 per cent of the full-time female faculty reported minority group membership (Table V-1).

#### Age

The median age for both full-time and part-time faculty was 38 years, with the youngest full-time faculty employed in branch campuses<sup>4</sup> and the youngest part-time faculty in technical institutes (Table V-2).

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<sup>3</sup>Lewis has noted that although the public schools are reluctant to hire part-time teachers, colleges are more concerned with obtaining qualified persons to teach specific courses than with obtaining full-time professionals who could neatly fit into the total program of the school. Consequently, part-time staffing is more common in colleges than in secondary schools, and these slots are generally occupied by well-trained women who are able, or are willing to work only part-time (Edwin C. Lewis, Developing Women's Potential. Iowa: Iowa State University Press, 1968, p. 164). This trend was also observed in our sample where there was a proportionately larger number of part-time women teachers in the branch campuses than in other less academically-oriented institutions in the study.

<sup>4</sup>This finding is not surprising since the majority of full-time teachers in branch campuses are recruited directly from graduate schools (see pp. 170-172).

The median age for full-time female faculty was one year older than that for men, with the oldest female group teaching in junior colleges. The oldest male faculty, on the other hand, were teaching in vocational-technical centers (Table V-3).

#### Current Marital Status

At the time of the survey nearly 80 per cent of the full-time faculty were married; two-thirds also had children. Married men (87%) outnumbered married women (60%) among full-time faculty, but the proportion of married part-time faculty was similar for both sexes (Table V-4 and V-5).<sup>5</sup> The majority of married female part-time faculty had children, while less than half of the married female full-time faculty had children.

Among the male full-time faculty members, those in the branch campuses and junior colleges were more likely to be single and tended to be slightly younger than those in technical institutes and vocational-technical centers.

#### Spouse's Employment

Over half of the full-time faculty spouses were employed. Nearly all of the husbands were employed (over 90%) while the employment rates

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<sup>5</sup>The labor force participation of married women has increased from 15 per cent in 1940 to 37 per cent in 1967. In the age group relevant to our study (35 to 44 years), the labor force participation of married women is reported to be 43 per cent (1969 Handbook on Women Workers, op. cit., p. 26). However, this rate increases to over 65 per cent for women in that age group with five or more years of education after high school (United States Bureau of the Census, Census of Population: 1960, Subject Reports, Educational Attainment, Final Report PC (2)-5B. United States Government Printing Office, Washington, D. C., 1963, Table 5, p. 71). Since nearly two-thirds of the full-time female faculty respondents in our study had at least an M. A. degree, the relatively high proportion of married women status of this group is in line with national statistics for women with similar levels of educational attainment.



among faculty wives ranged from 45 per cent for those whose husbands were employed in technical institutes to 40 per cent for those whose husbands were employed in vocational-technical centers (Table V-6). These differences in spouses' employment rates were also reflected in family incomes reported by our respondents in different schools.

#### Family Income

The median annual gross family income earned by the full-time faculty in our two-year college sample was \$12,848 (Table V-7). Since the family incomes of the female faculty members were generally supplemented by their husbands' earnings, they reported on the average \$2,420 more annual income than the male faculty.

The lowest family income was reported by teachers in vocational-technical centers--the group which also had the lowest percentage of employed wives. There was a tendency for the teachers in technical institutes and vocational-technical centers to report lower incomes than teachers in other schools. For instance, significantly more of the teachers in branch campuses and junior colleges report annual earnings above \$15,000 (34%) than those in technical institutes and vocational-technical centers (24%). The differences in the family incomes of these teachers reflect not only the fact that fewer family incomes of teachers in technical institutes and vocational-technical schools are supplemented by spouse's earnings, but also the fact that salaries of these teachers are generally lower than those in the branch campuses and junior colleges (see pp. 164-165).

### SES Background

Medsker<sup>6</sup> reports that 53 per cent of the staff in his study of junior colleges had come from a "white collar" background. Similar findings were obtained in this study. Just over half of the faculty respondents reported that their fathers were professionals or managers, sales or clerical workers.<sup>7</sup> Over one-fifth reported that their fathers were in skilled trades; the remainder were semi-skilled or service workers (Table V-8 and V-9).

There were no significant differences between male and female full-time faculty in terms of father's occupation, although slightly more women than men reported that their fathers were professionals or managers. There were also no significant differences among different types of schools, with the exception that nearly four times as many men as women in vocational-technical centers reported having fathers who were in skilled trade, clerical, or sales occupations. Finally, there did not seem to be any difference in the father's occupation for full-time and part-time faculty.

As mentioned earlier, fewer than one-fifth of the full-time faculty reported fathers with a college or graduate degree. Nearly 30 per cent of the fathers had a grade school education or less. There was a tendency for the full-time faculty in vocational-technical centers to have fathers with lower education than was the case for fathers of other teachers. Only one per cent of the fathers of teachers

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<sup>6</sup>Op. cit.

<sup>7</sup>Approximately 47 per cent of the faculty reported that their fathers were professionals or managers. This might be overrepresentation particularly in view of the fact that less than one-fifth of the faculty indicated that their fathers had a college or graduate degree.

in these schools had a college or graduate degree, while nearly 15 per cent of the fathers of teachers in other schools were reported to have a college or graduate degree.

Although the differences were not significant, more female than male full-time faculty reported fathers with higher degrees.

#### Type of Community Lived in While Growing Up

The backgrounds of the two-year college faculty were predominantly nonurban (Table V-11). Nearly half had grown up in a rural area or in a small town (population less than 10,000), while one-fifth had grown up either in a medium size city (10,000-100,000) or in its suburb. Just over one-fourth might be described as truly urban, having grown up in a city larger than 100,000 or in one of its suburbs.

More of the teachers in vocational-technical centers and technical institutes than in other institutions had grown up in a rural or small-town setting: e.g., two-thirds of the full-time teachers in vocational-technical centers and technical institutes came from small town or rural backgrounds while nearly half of those in junior colleges and branch campuses had lived in cities larger than 10,000 in population.

#### Occupational Characteristics

There were characteristic differences by type of school in teaching status, academic or occupational orientation, class loads, contract terms, salaries, and academic backgrounds of full-time teachers.<sup>8</sup>

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<sup>8</sup>This section of the report is limited to full-time teaching faculty only. Tables with full-time and part-time breakdowns are presented only when there are relevant differences in the responses of full-time and part-time faculty.

### Teaching Status

Over three-fourths of the teaching faculty were full-time (76.1%), with the proportion varying somewhat by type of school: 58 per cent in the branch campuses, 74 per cent in the junior colleges, 89 per cent in the technical institutes, and 88 per cent in the vocational-technical centers. Although there may be an underrepresentation of those who teach on an intermittent basis, particularly in the vocational-technical centers which often have a large roster of teachers available for special courses if the demand for them should arise, the percentages of full-time faculty were consistent with the institutional reports obtained from our sample of two-year colleges. Figure V-2 shows the distribution of teaching status by sex and type of school. As discussed earlier, the use of part-time teachers was more frequent in the academically-oriented schools than in occupationally-oriented schools. In the latter, nearly 9 out of 10 faculty members were full-time, while in the former the percentage varied from nearly two-thirds (branch campuses) to three-fourths (junior colleges).

### Contract Terms and Salary

Teachers in the technical institutes and vocational-technical centers averaged more class hours per week (Table V-12), had a longer work year (Table V-13), and received a lower teaching salary (Table V-14) than those in junior colleges and branch campuses.

The modal full-time teacher in a vocational-technical center taught nearly 30 hours per week, was apt to have a full-year contract rather than a 9-10 month academic contract, and earned on the average \$1,500 less annually than teachers in other schools. The teachers in technical institutes had slightly higher salaries, fewer class hours

and shorter contract terms than those in vocational-technical centers, but still worked harder and longer, and got paid less than teachers in junior colleges and branch campuses. The modal junior college teacher had a heavier teaching schedule than those in the branch campuses, but his salary was higher (than those in the branch campuses).

In terms of teaching load, both male and female teachers taught comparable hours, with men teaching slightly longer hours than women. More male (69%) than female (59%) teachers were on the shorter academic contract. In spite of shorter contract terms, men generally earned about \$1,000 more than women, although salaries varied by type of school. For example, male teachers in junior colleges and technical institutes earned more than male teachers in the branch campuses and vocational-technical centers, while female teachers in junior colleges earned more than women in technical institutes and vocational-technical centers and almost as much as men in junior colleges.

#### Major Subject Taught

As to be expected, the major course assignments of the faculty reflected the differences in educational philosophy of the schools in which they were employed (Table V-15). The proportion of full-time faculty teaching "academic" subjects (English, mathematics, science, social science, foreign language, fine arts, education, and physical education) ranged as follows: 87 per cent in the branch campuses, 73 per cent in the junior colleges, 28 per cent in the technical institutes, and 17 per cent in the vocational-technical centers.

Business was the most pervasive course among "occupational" subjects, taught by 35 per cent of the full-time faculty in technical

institutes and vocational-technical centers, and about 11 per cent of those in the branch campuses and junior colleges.

There is a definite segregation of subjects by sex, particularly among full-time faculty teaching occupational subjects. As traditional, teaching of health occupations and home economics was completely within the domain of women teachers both in junior colleges and in the more occupationally-oriented technical institutes and vocational-technical centers. Engineering, automotive and machine mechanics, skilled trades, etc., were definitely "male" subjects. On the other hand, there did not appear to be any clear segregation of subject matter by sex in academic subjects, with the exception of English, where there were proportionately more female than male teachers.

#### Degree Status

Sixty per cent of the full-time faculty had a master's in arts or in education, and five per cent had a doctorate (including Ed. D.). Nearly one-fifth had a B. A., while one out of ten had no degree (Table V-16).<sup>9</sup>

As might be expected, the prevalence of higher degrees was correlated with the academic orientation of the institution. Nearly 90 per cent of the full-time teachers in the branch campuses and over 80 per cent of those in the junior colleges had a master's or a higher degree. Nearly one-fifth in the branch campuses had a doctorate, while none of the teachers in technical institutes or vocational-technical

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<sup>9</sup>Teachers without degrees may be approved in many two-year colleges for instruction in vocational courses. The majority of the teachers without degrees in our sample were in the technical institutes and vocational-technical centers.

centers had this degree. Only one-fifth of the full-time teachers in the latter schools had a master's degree.

More full-time than part-time teachers had an M. A., but the reverse was true for teachers with the doctorate, indicating recruitment of the doctorates on a part-time basis (Table V-17).

Educational attainment among male and female full-time teachers in the branch campuses and junior colleges was comparable, while there was a definite sex difference in educational attainment of teachers in other schools. For instance, twice as many female teachers as male had an M. A. degree in vocational-technical centers, while nearly four times as many men as women in the same institutions were teaching without any degree. Interpretation of this finding is difficult, but it seems that in vocational-technical schools more training is required from female than male teachers.

Generally, faculty in academically-oriented institutions appeared to have better educational training than faculty in vocationally-oriented schools. However, there were indications that this imbalance in degree status may be changing rapidly. Forty five per cent of the faculty in technical institutes and vocational-technical centers were currently working toward a higher degree, in contrast to less than 30 per cent of the faculty in the branch campuses and junior colleges (Tables V-18, V-19). Although one might assume that more of the part-time faculty than full-time faculty would be engaged in such activities, the results indicate that the reverse is true. Of the two-year college faculty members who were currently working toward a degree, one-third of the full-time teachers and 45 per cent of the part-time teachers were working toward a doctorate.

Over one-fourth in both groups were working toward an M. A., and about one-fifth toward a B. A. (Table V-20, V-21).

For every degree except the doctorate, the proportion of teachers in technical institutes and vocational-technical centers attempting to get a degree was higher than that for teachers in the branch campuses and junior colleges. If current staff programs are carried through to completion, the number of teachers in technical institutes and vocational-technical centers with less than a B. A. would be reduced by half and the number of teachers with an M.A. would be almost doubled, thus partially reducing the discrepancy in degree status of teachers in different types of two-year colleges in our sample.

#### Other Academic and Technical Training

Forty per cent of the full-time faculty had also taken some nondegree training between June 1968 and 1969. Such training was most frequent among full-time teachers in vocational-technical centers (over half of the men and nearly two-thirds of the women) and least frequent in the branch campuses (Table V-22). Although more of the teachers in branch campuses and junior colleges had higher degrees, those in vocational-technical centers and technical institutes were trying to enhance their status through additional degree work or through nondegree training. Traditional coursework was by far the most frequent form of additional training; nearly two-thirds of all full-time faculty followed this route (Table V-23).

When asked about the type of inservice training needed, only one-fourth of the full-time faculty stated that such training would be valuable to them in their present position. Of those agreeing to the necessity of inservice training, one-third mentioned coursework training



as most valuable training, while over one-fourth indicated the need for seminars and lectures (Table V-24). Twice as many female teachers as male teachers in technical institutes and vocational-technical centers reported needing institute or workshop training, while in general more male than female teachers preferred coursework or in-field training.

Over half of the full-time faculty stated that the best time for inservice training was during the school year (Table V-25). More male teachers than female, and slightly more of those in academically-oriented institutions than in others favored inservice training during summer. Although the teachers in technical institutes and vocational-technical centers had longer hours and heavier work loads, they still preferred inservice training during the school year. Of course, since a majority of them also have 11-12 month contracts, the school year is the only time they can possibly have such training.

### Teaching Experience

On the whole, the two-year college faculty in our sample were an experienced teaching staff. Less than ten per cent had taught for one year or less (Table V-26). The median number of years taught was nearly eight years for both male and female faculty members, with those in academically-oriented schools having a year or two more teaching experience than those in technical institutes and vocational-technical centers.

In accord with earlier findings reported by Koos<sup>10</sup> and Medsker,<sup>11</sup> it was found that nearly two-thirds of the full-time faculty in our sample

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<sup>10</sup>Leonard V. Koos, "Junior College Teachers: Degrees and Graduate Residence," Junior College Journal, 1947, 18, pp. 77-89.

<sup>11</sup>Op. cit., p. 172.

had formerly taught in other junior colleges. However, there were definite differences by type of school (Table V-27). Nearly 90 per cent of the full-time faculty in junior colleges had taught in other junior colleges, but just over one-third of those in the branch campuses and less than five per cent of those in technical institutes and vocational-technical centers had taught in junior colleges (Table V-27).

Less than half of the full-time faculty had taught in high schools. Two-thirds of the full-time faculty in the branch campuses and about 30 per cent of those in the junior colleges had teaching experience in four-year colleges while fewer than one out of ten teachers in technical institutes or vocational-technical centers had such experience. As will be discussed in the next section, the majority of the teachers in technical institutes and vocational-technical centers had work experience outside education, presumably directly related to their subject matter.

#### Work Experience Outside Education

Although the majority of the two-year college faculty have had six or more years of teaching experience, they have also had considerable work experience outside education. Incidence of full-time employment outside education (excluding summer work) ranged from over 80 per cent of the full-time teachers in technical institutes and vocational-technical schools to two-thirds of the those in junior colleges and over half of those in branch campuses (Table V-28). Modal number of total years spent in employment outside education was greatest for those in vocational-technical centers (nearly 16 years for males) and least (six years) for those in branch campuses and junior colleges (Table V-29).

Data clearly supported the expectation that a major proportion of the staff in technical schools would be recruited from outside

education. About half of the teachers in technical institutes and vocational-technical centers had been recruited from areas outside of education, whereas about half of the teachers in junior colleges had been recruited from other educational institutions. Half of the full-time teachers in the branch campuses, on the other hand, had come to their teaching positions directly from graduate school (Table V-30).

Most of the work experience of the two-year faculty outside of education was in business (Table V-31). The second most frequent area of work experience outside education was skilled trades for male teachers and health services for female.

It is interesting to note that the postsecondary occupational institutions have been able to recruit and hold faculty with extensive occupational training despite their relatively low salaries and heavy teaching loads. One clue as to why this recruitment has been so successful is the fact that almost twice as many full-time teachers in these schools as in others chose education as a profession after having started a career in another occupation, presumably one that was less satisfying (Table V-32). The reverse is true for teachers in the branch campuses and junior colleges who more often decided in undergraduate or graduate schools to become teachers.

The importance of cultural expectations is reflected in the finding that twice as many female as male faculty members said that they always wanted to become a teacher; otherwise the career choices of male and female faculty members appear similar.

One final finding relative to the current interest in the recruitment of faculty from retired career military is noteworthy; a very small percentage (1.4%) of the total two-year college

faculty were recruited from this source. However, about 9 per cent of the teachers in the vocational-technical centers were retired military personnel.

When asked about the reasons for working in a two-year college, there was very low agreement among the full-time faculty members. Only about one-third stated that they were employed in a two-year college because they were interested in teaching at this level; the majority chose less "professionally" oriented reasons. Approximately 15 per cent each mentioned the following as motivating factors: the possibility of advancement, personal reasons, and compatibility with background (Table V-33). As to be expected twice as many teachers in vocational-technical centers as in others mentioned the last as a motivating factor.

#### Adequacy of Training

It is apparent that the majority of the two-year college faculty members in the sample had had several years of higher education, teaching experience, and work experience outside of the field of education. In the light of this rich and varied background, how do they rate the adequacy of their training in several critical areas? Table V-34 summarizes the data on hand by showing the proportions of two-year college faculty who rated the adequacy of their training in specific areas as good (the other response options were adequate, inadequate, and none, which are not shown on the table). It is apparent that the area of highest confidence lies with their teaching ability. Over three-fourths of the full-time faculty in the branch campuses and junior colleges and over half of those in technical institutes and vocational-technical centers rated their training in "subject matter preparation for major

current assignment" as good. Two other training categories were rated good by at least half of the respondents and both of these areas were directly related to teaching: managing classroom routine and subject matter preparation for other assignments.

On the other hand only about one-third of the full-time faculty had confidence regarding their ability to motivate students to learn, working as a member of an educational team, making curriculum relevant to students, and utilizing innovative teaching methods.

Although teachers in vocational-technical centers appeared slightly less confident than others, the two-year college faculty as a whole were very confident about their ability regarding "subject matter preparation for major current" or "other current assignments." However, there were some indications that the two-year college faculty, as it might be the case with all other faculty, were more comfortable in classroom situations than in those that required interaction on a personal, face-to-face level. Less than one in four were confident about counseling students, working with community leaders, or with administrators. There was also a great reluctance to rate one's capacity to prepare material for the slow learner as good.

There were also some apparent differences between male and female faculty members. For instance, more females than males felt that they could understand students from a different culture or motivate students to learn--possibly reflecting the cultural expectations that the female teacher should also play the nurturing "feminine" role. In addition, almost twice as many female as male teachers in vocational-technical centers stated that they can adequately prepare and teach their

current major assignment or other current assignment--possibly reflecting a realistic appraisal of their capacity since twice as many female teachers as males had a master's degree in these schools.

These findings have policy implications as the two-year colleges gear themselves to receive more educationally-disadvantaged students. Unless the faculty motivation to understand and interest the student from an impoverished background is cultivated through better training in tailoring course materials to the pace and experience of the individual student, we can expect frustration and eventual disillusionment among the faculty, and probably, among the students.

A forerunner of such a state of affairs is indicated in the replies to the question regarding whether the respondent would like to see any changes in the makeup of the student body in his school (Table V-35). Nearly 90 per cent of the full-time faculty answered this question, and less than half were satisfied with the current mix. About 30 per cent would like to impose higher academic standards on the students. This was a point particularly shared by the male teachers in vocational-technical centers where nearly 60 per cent stressed the importance of increasing the academic standards of their schools. It might be also interesting to note that there was very little interest in having more transfer students or more technical students. The quality of students seems to be a more serious problem, at least for some of the full-time faculty, than what the students might plan to do.

#### Satisfaction With Job

Although there was some dissatisfaction expressed by at least 30 per cent of the full-time faculty regarding the composition of the student

body in two-year colleges, rapport with students contributed greatly to rewards obtained from teaching in these schools. Table V-36 presents the proportion of full-time faculty reporting "very satisfied" with specific aspects of their job. Nearly two-thirds stated that they were very satisfied with their rapport with students; about half indicated satisfaction with their rapport with other teachers, and one-third with their rapport with administrative personnel. Fewer than half were satisfied with job security or reputation of the school.

There were some interesting differences in the ratings by type of school. For instance, more male teachers in vocational-technical centers than in other institutions displayed a tendency to express satisfaction with the prestige of the job, with its opportunities for inservice training and for research, and its intellectual atmosphere. If we consider the fact that the majority of the male teachers in vocational-technical centers had moved to teaching from business or skilled trades and that over half had no degree or only an A. A., it becomes more understandable why they would be more satisfied with their present jobs than would teachers with higher degrees or with teaching experience in other educational institutions.<sup>12</sup> However, in spite of their satisfaction, teachers in vocational-technical schools appeared less eager to continue in the same type of job although over half indicated willingness to do so.

Table V-37 presents long-range career plans of full-time faculty. Basically, about 64 per cent would like to stay in two-year colleges,

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<sup>12</sup>Part of their satisfaction can also be accounted for by the fact that they had "neither the qualifications nor the inclination to teach in a senior institution" as was pointed out by Medsker, op. cit., p. 175.

while an additional 22 per cent would like to stay in education but move to a different job. Only about five per cent were disenchanted enough to think of leaving education for another occupation. The percentages were small, but proportionately twice as many male faculty in technical institutes and vocational-technical centers were planning to leave education as others. Although the results can be interpreted only with caution, there does seem to be an ambivalence among teachers in technical institutes and particularly in vocational-technical centers toward their job situation which does not seem to exist for the full-time faculty employed in the branch campuses or junior colleges. However, it should be remembered that the average faculty member in these latter schools was relatively well trained for his position, carried a lighter work load than teachers in technical schools, and was generally better compensated.

Medsker<sup>13</sup> reports somewhat similar findings, although less than half of the total group of the faculty in his study indicated a preference for continuing with their present job. However, there were differences in preference by type of school. For instance, while two-thirds of the faculty in "extension" centers preferred teaching in a four-year college, the professional staff at state institutions, most of which were occupationally-oriented, were interested in staying in two-year colleges.

It would seem that the degree of satisfaction felt with the present job would be a function of a variety of factors such as the level of confidence in one's own training, capabilities of the institution in which one works, relationships with other colleagues or administrators, working conditions, opportunities for inservice training and for

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<sup>13</sup>Op. cit., p. 174 ff.



advancement, etc. It can also be assumed that the attitudes and beliefs a person has concerning the nature and functions of his school would, to some degree, determine his satisfaction with his job. The next section describes the responses obtained regarding the adequacy of school services and the role the two-year colleges should play in the total system of higher education.

### Attitudes Toward School Services and Policy

#### Adequacy of Institutional Services

The relationship between the educational philosophies of the schools and the faculty perception of various institutional functions was most evident for teachers in schools at the extremes of the academic-occupational continuum, that is, for those in the branch campuses and vocational-technical centers. For instance, the percentage of "no answers" to questions regarding the academic functions of the two-year colleges (e.g., suitability of academic courses for state colleges or for major universities, quality of academic instruction, board of trustees' support for academic program, academic counseling) was consistently higher for the teachers in vocational-technical schools than in others. Similarly, there was a high percentage of "no answers" from teachers in the branch campuses regarding the purpose and quality of vocational instructions.

Table V-38 presents the proportion of full-time faculty who rated various institutional services as "adequate." The results indicate differences similar to the ones discussed above in the perceptions of teachers who responded to the questions. For instance, those in academically-oriented schools rated the adequacy of teaching and

coursework related to academic subjects higher than that of occupational subjects; similarly, full-time faculty in technical institutes and vocational-technical centers rated the adequacy of teaching and coursework related to occupations higher than that of academic subjects; again these differences were most striking for the teachers in the branch campuses and in the vocational-technical centers.

Generally, about two-thirds of the full-time faculty in academic schools agreed that the quality of academic instruction and academic courses in their schools were above average or excellent, while the same proportion of the full-time faculty in technical schools expressed similar opinions about occupational subjects in their schools.

Although the full-time faculty in all four groups appeared satisfied with the quality of teaching and coursework in their respective specialties, less than one-third expressed satisfaction with counseling, either academic or vocational, while slightly more than one-fourth rated remedial and tutorial services as very adequate or excellent. Full-time faculty members in vocational-technical centers were particularly critical about remedial and tutorial services in their schools, with only 15 per cent rating these services as above average or excellent.

Examination of the total pattern of ratings indicated that those in the vocational-technical centers were most critical, being relatively well-pleased only with the quality and suitability of vocational training in their institutions. Branch campus faculty were also quite critical of all services except the quality and suitability of academic instruction in their schools. While recognizing that academic and vocational services were not equally good, those in junior colleges and technical institutes

gave relatively higher ratings to all services than did their colleagues at the two ends of the continuum of educational philosophy.

#### Faculty Responsibility

Over half of the full-time faculty in two-year colleges in our sample agreed that their responsibilities were limited to areas directly related to teaching, such as determining specific course content, curricula planning and development, and student evaluation procedures (Table V-39). There was even stronger consensus regarding the responsibilities of the administrators. Over three-fourths of the full-time faculty agreed that selection and promotion of faculty, budget planning, and admission criteria were in the hands of administrators. Over 60 per cent also agreed that administrators had primary responsibilities over faculty evaluation, resolution of faculty or student grievances, degree and certificate requirements, and disciplinary or academic student dismissals. The role of the board of trustees was seen as limited to the selection of administrators by less than half of the full-time faculty.

Although the administrators were generally perceived as somewhat more powerful than teachers, when asked about areas in which the teaching faculty should have more responsibility, fewer than half of the full-time faculty members responded with suggestions, none of which received more than ten per cent agreement. Similarly, when asked about areas in which students should have more responsibility, only 41 per cent of the full-time faculty responded. One-fourth agreed that students should have more responsibility in resolving student grievances, and one-fifth agreed that they should be involved in the disciplinary dismissals of fellow students. The rest of the suggestions failed to reach ten per cent agreement, and there were no differences by sex or by type of school.

### Future Institutional Roles

The last question on the schedule asked the respondent whether he agreed with certain actions his institution might take. The results are summarized in Table V-40. Certain general and not always compatible goals emerged from these data.

First, over three-fourths of the full-time faculty agreed with the idea of strengthening occupational courses by increasing the number of adult education courses and occupational programs. Over half also supported the addition of courses offering occupational training for local and other job markets. As was expected, the teachers in the vocational-technical schools endorsed these statements more often than others, while those in the branch campuses gave the fewest endorsements. The faculty members were also interested in preparing students for academic achievement. Over three-fourths agreed with suggestions to increase the number of remedial offerings, while approximately 60 per cent stated that the students should be prepared for any university. About 40 per cent also stressed the importance of preparing students for state universities. The least agreement in these areas came from those in vocational-technical centers, although again almost half of these teachers agreed that the number of transfer programs should be increased.

The teachers in academically-oriented schools stressed the preparatory and general academic functions of their schools more than they did the vocational and remedial functions and the teachers in technical schools took the opposite point of view. The majority of the full-time faculty in the two-year colleges in our sample reported that they would like to see their institutions become more comprehensive by increasing the number of occupational and transfer programs, remedial

offerings, and adult education courses. However, they did not want to open additional campuses or become four-year colleges. The significant exception to the latter is the branch campus faculty, over half of whom did want their schools to become four-year colleges. One wonders how the other schools can increase all of these program offerings without expanding either horizontally or vertically.

In addition to these expansionistic views (that is, curriculumwise), the majority of the respondents also wanted their institutions to continue to specialize in their current primary functions: lower division college work, hopefully preparatory for any university, in the branch campuses and junior colleges, and occupational training, particularly suitable for immediate job placement in the local job market, in the technical institutes and vocational-technical centers.

Although there was a desire to increase occupational programs and remedial services, the data indicated that the teachers in two-year colleges were quite concerned about the requirements for the admission of students. For example, only 38 per cent would agree to open-admissions, while over half would prefer high school graduates only. It is interesting to note that more of the faculty in the technical institutes and vocational-technical centers than in others advocated restricting admission to high school graduates. Perhaps they felt that the inadequate remedial services in their institutions were taxed enough by poorly prepared high school graduates and that this precluded welcoming those without even this minimal qualification for advanced study.

Summary

The results clearly indicated some differences among the two-year college faculty members, dependent on the type of school in which they were employed.

In general, the two-year college faculty population was predominantly white and male, with men outnumbering women in both full-time and part-time teaching positions and in nonteaching professional positions. The two-year college faculty were also predominantly middle-class, with over half of the fathers in "white collar" occupations. The teachers in technical institutes and vocational-technical centers reported somewhat lower family incomes, had higher proportions of rural or small town backgrounds, and had fathers with lower education than those in junior colleges and branch campuses. The teachers in technical institutes and vocational-technical centers also had heavier teaching schedules (longer class hours and contracts) and received lower salaries than others.

The academic qualifications of the two-year college faculty varied by type of school, with teachers in the academically-oriented schools having higher degrees than those in the technical schools. However, since there is a strong trend among the teachers in the latter schools to obtain the bachelor's or the master's degree, it is reasonable to assume that this discrepancy in degree status would eventually be considerably reduced.

The majority of the teachers in technical schools were recruited from outside the field of education, mostly from business, while those in the junior colleges and branch campuses were recruited from inside the field; those in the junior colleges came from other teaching positions and those in the branch campuses from graduate schools.

The majority of the teachers felt very confident about their effectiveness as teachers but were relatively unhappy with their ability to act as counselors or to work directly with academically handicapped students. The teachers in the technical schools were less satisfied than others about the counseling and remedial services in their schools, but in general, they were more satisfied with more aspects of their schools than were others. However, they demonstrated a greater degree of ambivalence concerning their long-range career plans.

Finally, the majority of two-year faculty expressed a desire to see their institutions become more comprehensive, although there was a reluctance to have an open-door policy. To a surprising extent, not only junior college and branch campus teachers, but also those in occupation-oriented institutions, saw the need for increasing transfer and continuation opportunities for their students and graduates.

## SECTION V TABLES

Note: Due to small N, 13 full-time female teachers in the branch campuses were excluded from tables grouped by sex.

The row percentages in some tables may not add up to 100 per cent either due to rounding or to inclusion of "No answers" in the base, which are not shown in the percentage columns.



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FIGURE V-1

SEX DISTRIBUTION BY TEACHING STATUS AND TYPE OF SCHOOL

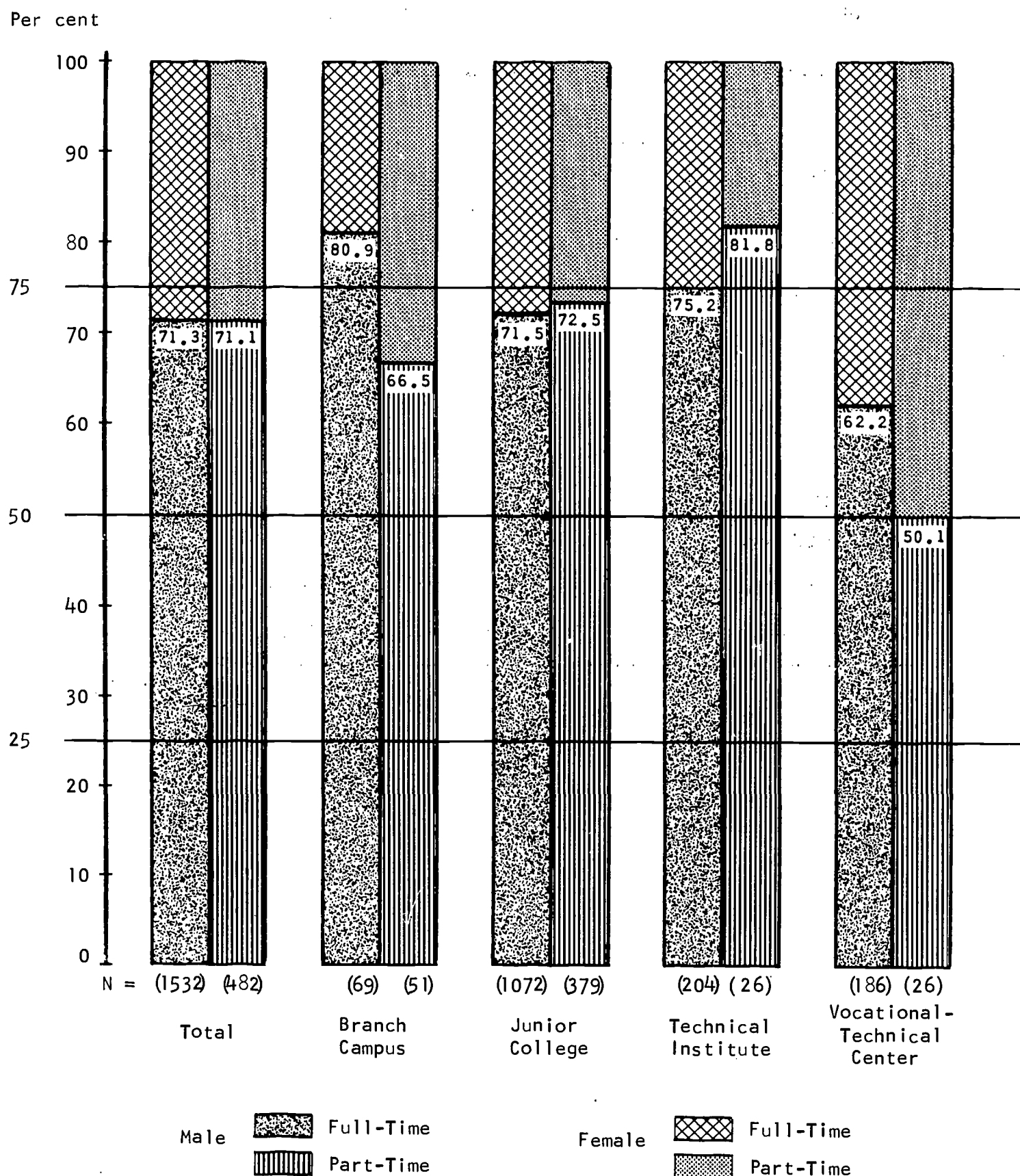


TABLE V-1

MINORITY GROUP STATUS BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Minority	Nonminority	NA
TOTAL	1,519	2.5	95.4	2.1
<u>Total Males</u>	1,092	1.7	96.2	2.1
Branch Campus	56	0.9	91.3	7.8
Junior College	767	2.2	96.0	1.8
Technical Institute	153	-	98.7	1.3
Voc-Tech Center	116	-	97.1	2.9
<u>Total Females</u>	427	5.0	93.2	1.8
Junior College	306	3.0	95.3	1.7
Technical Institute	51	4.6	93.5	1.9
Voc-Tech Center	70	14.2	85.8	-

TABLE V-2  
AGE DISTRIBUTION BY TEACHING STATUS AND TYPE OF SCHOOL  
(In Percentages)

	N	24 and Below	25-29	30-39	40-49	50-59	60 and Over	Median Age
TOTAL	2,015	2.8	19.0	32.6	25.6	15.6	3.6	38
<u>Total Full-Time</u>	1,532	3.0	19.1	32.6	26.1	15.3	3.2	38
Branch Campus	69	2.3	31.0	31.8	19.5	11.6	3.8	35
Junior College	1,072	2.7	18.6	34.6	25.5	14.1	3.4	38
Technical Institute	204	3.8	18.9	28.1	25.1	21.5	2.3	39
Voc-Tech Center	186	4.1	17.4	25.7	33.0	16.4	2.8	40
<u>Total Part-Time</u>	483	2.0	18.7	32.6	24.3	16.9	4.7	38
Branch Campus	51	-	21.4	20.8	15.8	32.7	9.3	40
Junior College	379	1.9	19.0	31.7	25.5	16.2	4.7	39
Technical Institute	26	7.4	3.1	56.4	29.5	3.6	-	33
Voc-Tech Center	26	2.7	23.8	45.4	18.5	9.4	-	35

TABLE V-3  
AGE DISTRIBUTION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	24 and Below	25-29	30-39	40-49	50-59	60 and Over	Median Age
TOTAL	1,519	3.1	18.9	32.5	26.2	15.3	3.2	38
<u>Total Males</u>	1,092	3.5	17.6	34.9	26.3	14.6	2.4	38
Branch Campus	56	2.6	30.4	30.4	21.4	10.7	3.6	38
Junior College	767	2.9	17.2	38.3	25.3	13.0	2.5	37
Technical Institute	153	5.1	17.3	27.5	27.5	21.4	0.7	39
Voc-Tech Center	116	6.0	14.4	23.9	33.3	17.7	3.9	41
<u>Total Females</u>	427	1.8	22.5	26.5	26.0	16.8	5.2	39
Junior College	306	2.3	22.3	25.3	25.9	16.9	5.8	46
Technical Institute	51	-	23.7	30.2	18.2	21.5	6.4	38
Voc-Tech Center	70	1.4	22.5	28.2	32.4	14.1	1.4	39

TABLE V-L<sub>1</sub>

CURRENT MARITAL STATUS BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Never Married	Married, No Children	Married, Children	Other (Widowed, Separated, Divorced)
TOTAL	1,519	13.6	14.2	65.4	6.1
<u>Total Males</u>	1,092	9.7	13.3	73.9	2.6
Branch Campus	56	14.8	10.4	69.1	5.7
Junior College	767	11.7	12.8	71.6	3.2
Technical Institute	153	5.3	15.9	77.9	0.8
Voc-Tech Center	116	1.2	14.2	84.6	-
<u>Total Females</u>	427	23.4	16.4	44.3	15.0
Junior College	306	27.1	17.4	39.0	15.1
Technical Institute	51	8.0	8.1	62.1	21.8
Voc-Tech Center	70	18.7	18.5	53.3	9.5

TABLE V-5

CURRENT MARITAL STATUS BY TEACHING STATUS AND TYPE OF SCHOOL  
(In Percentages)

	N	Never Married	Married, No Children	Married, Children	Other (Widowed, Separated, Divorced)
TOTAL	2,015	13.4	13.2	66.6	6.2
<u>Total Full-Time</u>	1,532	13.6	14.2	65.2	6.2
Branch Campus	69	14.5	12.5	64.2	8.8
Junior College	1,072	16.1	14.1	62.3	6.6
Technical Institute	204	6.0	14.0	74.0	6.0
Voc-Tech Center	186	7.7	15.7	72.8	3.8
<u>Total Part-Time</u>	483	12.5	9.8	71.1	6.1
Branch Campus	51	10.3	12.1	74.5	3.1
Junior College	379	13.7	10.0	68.8	6.9
Technical Institute	26	10.7	4.9	84.4	-
Voc-Tech Center	27	-	8.3	84.9	6.8

TABLE V-6

SPOUSE'S EMPLOYMENT OUTSIDE THE HOME BY SEX AND TYPE  
OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Yes	No
TOTAL	1,199	52.7	47.3
<u>Total Males</u>	943	41.7	58.4
Branch Campus	44	42.1	57.9
Junior College	642	41.1	58.9
Technical Institute	144	45.0	55.0
Voc-Tech Center	113	39.5	60.5
<u>Total Females</u>	257	92.1	7.5
Junior College	172	90.2	9.8
Technical Institute	36	91.0	9.0
Voc-Tech Center	49	100.0	-

TABLE V-7

ANNUAL FAMILY INCOME BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	0- 6,999	7,000- 9,999	10,000- 14,999	15,000 19,999	20,000 or More	Median	Mean
TOTAL	1,487	3.5	22.1	43.0	19.7	11.9	12,848	13,471
<u>Total Males</u>	1,078	3.7	22.2	49.4	17.3	7.5	12,444	12,893
Branch Campus	55	8.0	23.2	51.4	9.0	8.3	11,897	12,268
Junior College	756	3.5	18.2	49.4	20.5	8.5	12,874	13,337
Technical Institute	153	2.9	24.8	54.8	9.8	7.8	12,054	12,546
Voc-Tech Center	114	5.5	44.9	39.6	10.0	-	9,971	10,704
<u>Total Females</u>	409	2.9	21.8	26.2	26.2	23.2	14,860	14,990
Junior College	299	2.9	20.5	27.1	22.6	26.9	14,969	15,289
Technical Institute	48	-	24.5	22.3	46.9	6.4	14,319	14,417
Voc-Tech Center	62	5.7	25.2	24.7	27.5	16.8	13,833	14,008



TABLE V-8  
FATHER'S OCCUPATION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Professional, Managerial	Clerical, Sales	Skilled Trades	Semi- Skilled	Service Workers
TOTAL	1,519	46.1	7.8	22.7	13.4	4.5
<u>Total Males</u>	1,092	44.6	8.5	24.1	14.8	3.6
Branch Campus	56	42.3	9.5	17.9	21.2	9.1
Junior College	767	45.1	9.4	21.9	14.7	3.9
Technical Institute	153	43.0	1.3	27.1	21.2	2.1
Voc-Tech Center	116	44.4	12.4	36.0	3.7	0.8
<u>Total Females</u>	427	49.9	5.8	19.2	9.8	7.0
Junior College	306	51.7	6.9	20.7	10.5	4.2
Technical Institute	51	45.6	1.4	23.2	15.0	2.3
Voc-Tech Center	70	45.0	3.6	9.3	5.3	22.8

TABLE

FATHER'S OCCUPATION BY TEACHING STATUS AND TYPE OF SCHOOL  
(In Percentages)

	N	Professional, Managerial	Clerical, Sales	Skilled Trades	Semi- Skilled	Service Workers
TOTAL	2,015	46.5	8.7	21.8	13.0	4.6
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Total Full-Time	1,532	46.3	7.8	22.7	13.4	4.5
Branch Campus	69	45.7	9.5	19.5	17.2	8.1
Junior College	1,072	46.9	8.7	21.6	13.5	4.0
Technical Institute	204	43.7	1.3	26.2	19.6	2.2
Voc-Tech Center	186	44.6	9.1	25.9	4.2	9.1
<hr/>						
Total Part-Time	483	47.2	11.6	18.9	11.6	5.0
Branch Campus	51	59.8	4.9	17.8	5.2	-
Junior College	379	46.1	13.6	18.6	12.3	8.8
Technical Institute	26	45.8	8.4	25.5	12.0	2.5
Voc-Tech Center	26	49.4	-	17.6	8.8	3.8

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TABLE V-10  
FATHER'S EDUCATION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Grade School or Less	Some High School	High School Graduate	Post-High School or Some College	College Graduate	Graduate or Professional Degree
TOTAL	1,519	28.8	18.3	17.6	16.4	6.5	8.1
<u>Total Males</u>	1,092	29.8	17.5	19.0	16.4	6.4	6.6
Branch Campus	56	41.3	3.8	16.4	22.2	8.9	3.8
Junior College	767	29.1	16.0	19.2	17.3	6.8	8.1
Technical Institute	153	31.5	27.3	14.1	10.3	7.6	4.4
Voc-Tech Center	116	26.9	20.7	26.2	14.9	0.8	0.6
<u>Total Females</u>	427	26.6	20.2	13.6	16.5	7.0	12.0
Junior College	306	21.4	17.7	15.1	19.2	8.5	14.1
Technical Institute	51	41.8	23.4	8.1	6.2	7.4	9.1
Voc-Tech Center	70	38.4	27.8	11.5	13.1	-	5.1

TABLE V-11

TYPE OF COMMUNITY LIVED IN WHILE GROWING UP BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Open Country or Farming Community	Small Town (Less than 10,000)	In a Medium Size City (10,000- 100,000)	In a Suburb of a Medium Size City	In a Large or Very Large City (100,000 and Over)	In a Suburb of a Large or Very Large City
TOTAL	1,519	25.1	22.6	19.6	3.8	17.9	9.4
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<u>Total Males</u>	1,092	25.7	20.8	19.2	4.2	18.5	9.9
Branch Campus	56	19.7	22.4	27.4	11.1	7.8	8.0
Junior College	767	20.7	19.6	20.8	2.2	24.2	10.8
Technical Institute	153	37.5	29.5	17.1	0.9	7.0	7.8
Voc-Tech Center	116	45.8	15.2	8.5	18.8	1.1	7.1
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<u>Total Females</u>	427	23.9	27.2	20.4	2.6	16.4	8.0
Junior College	306	17.5	26.6	21.7	3.3	19.1	9.9
Technical Institute	51	36.9	32.4	15.0	1.7	5.6	7.1
Voc-Tech Center	70	41.1	27.0	18.6	-	12.9	-

FIGURE V-2

TEACHING STATUS BY SEX AND TYPE OF SCHOOL

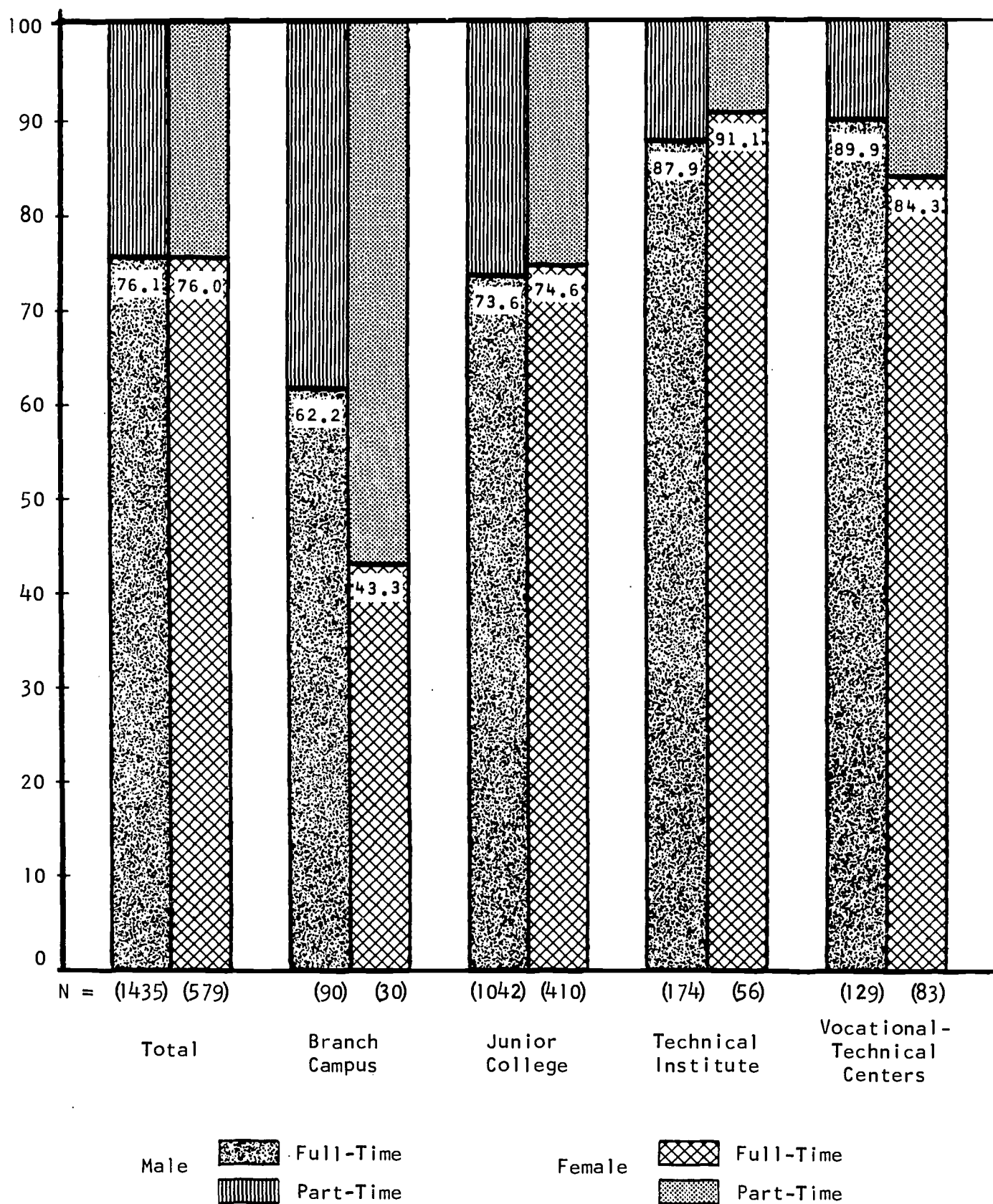


TABLE V-12

TOTAL CLASS-HOURS PER WEEK BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	1-9	10-15	16-21	22-33	34-49	Median	Mean
TOTAL	1,503	6.0	43.1	26.7	19.2	4.9	16.19	17.98
<u>Total Males</u>	1,081	5.6	43.3	27.6	19.3	4.2	16.25	17.87
Branch Campus	55	21.8	67.3	7.3	3.6	-	12.51	11.84
Junior College	763	5.7	51.0	30.7	10.6	2.0	15.21	16.07
Technical Institute	150	2.0	26.0	26.0	36.0	10.0	21.08	22.21
Voc-Tech Center	113	0.9	2.6	18.6	63.7	14.2	27.25	27.21
<u>Total Females</u>	422	7.1	42.6	24.6	19.0	6.6	15.95	18.21
Junior College	305	6.9	54.4	27.5	9.5	1.6	14.75	15.54
Technical Institute	50	6.0	22.0	28.0	34.0	10.0	20.71	21.73
Voc-Tech Center	67	9.0	4.5	9.0	50.7	26.8	28.53	27.77

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TABLE V-13

CONTRACT TERMS IN MONTHS BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	9-10 Months	11-12 Months	Other
TOTAL	1,434	66.4	31.3	2.3
<u>Total Males</u>	1,040	69.3	28.8	1.9
Branch Campus	54	76.0	14.8	9.2
Junior College	731	81.0	18.3	0.7
Technical Institute	145	49.7	44.8	5.5
Voc-Tech Center	110	14.4	83.8	1.8
<u>Total Females</u>	394	58.5	38.0	3.5
Junior College	280	73.2	25.0	1.8
Technical Institute	47	45.8	52.1	2.1
Voc-Tech Center	67	6.0	82.1	11.9

TABLE V-14

SALARY FROM CONTRACT BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	0- 6,999	7,000- 9,999	10,000- 11,999	12,000- 14,999	15,000 or More	Median	Mean
TOTAL	1,493	2.1	49.5	27.8	18.1	2.5	9.90	10.19
<u>Total Males</u>	1,075	2.0	44.6	30.1	20.5	2.8	10.22	10.40
Branch Campus	55	5.2	62.0	26.2	6.7	-	9.21	9.26
Junior College	754	1.2	37.8	31.6	25.4	3.9	10.70	10.82
Technical Institute	152	2.5	39.1	43.8	14.0	-	10.36	10.16
Voc-Tech Center	114	5.3	88.7	3.8	2.2	-	8.51	8.46
<u>Total Females</u>	418	2.4	61.8	21.9	12.2	1.7	9.31	9.67
Junior College	300	2.7	52.0	26.0	17.0	2.3	9.73	10.05
Technical Institute	50	2.0	82.0	16.0	-	-	8.76	8.80
Voc-Tech Center	68	1.4	89.9	8.7	-	-	8.62	8.64

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TABLE V-15  
MAJOR SUBJECT TAUGHT BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

Sex by Type of School		N		Academic Subjects							Occupational Subjects							
				English	Mathematics	Science	Social Science	Foreign Language	Fine Arts	Physical Education	Education	Business	Health Occupations	Home Services	Engineering	Automotive and Machine Mechanics	Skilled Trades	Agriculture
TOTAL		1,519	14.1	8.2	12.1	13.5	2.5	5.7	4.2	0.3	15.0	6.0	1.7	8.0	5.7	1.6	0.9	0.5
Total Males		1,092	10.9	10.0	14.1	15.5	2.5	6.2	3.9	0.2	12.5	0.8	0.5	11.1	7.9	2.2	1.2	0.6
Branch Campus		56	15.2	13.2	15.7	35.9	-	3.8	-	2.9	8.0	-	0.9	3.6	0.9	-	-	-
Junior College		767	13.1	11.0	17.2	18.2	3.6	7.1	5.4	-	9.3	1.1	0.2	6.9	3.3	1.5	1.2	0.9
Technical Institute		153	3.3	9.6	7.7	3.2	-	2.3	0.3	-	25.4	-	1.7	24.0	15.3	5.6	1.6	-
Voc-Tech Center		116	4.6	2.9	0.6	4.3	-	7.2	-	-	19.3	-	-	24.8	31.6	3.9	0.7	-
Total Females		427	22.2	3.7	7.0	8.7	2.6	4.4	4.9	0.4	21.5	19.2	4.9	0.2	-	-	-	-
Junior College		306	27.8	4.8	8.1	11.4	3.5	5.0	5.7	0.5	14.5	17.9	0.4	0.3	-	-	-	-
Technical Institute		51	19.1	-	-	1.9	-	4.9	4.9	-	42.6	23.5	3.1	-	-	-	-	-
Voc-Tech Center		70	1.0	1.0	7.1	1.5	-	1.8	-	-	39.5	22.5	25.6	-	-	-	-	-

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TABLE V-16

HIGHEST DEGREE BEYOND HIGH SCHOOL BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	A.A.	B.A.; B.Ed.	M.A.; M.Ed.	Ph.D.; Ed.D.	Other
TOTAL	1,519	3.1	17.2	61.9	3.8	3.7
<u>Total Males</u>	1,092	3.2	15.8	62.5	4.2	2.0
Branch Campus	56	-	8.9	71.4	19.6	-
Junior College	767	1.3	9.4	75.9	4.5	2.4
Technical Institute	153	4.6	38.5	31.9	-	2.4
Voc-Tech Center	116	15.3	31.2	10.9	-	-
<u>Total Females</u>	427	2.8	20.8	60.2	2.8	8.0
Junior College	306	0.9	10.0	77.4	3.9	4.8
Technical Institute	51	1.4	69.1	9.3	-	12.2
Voc-Tech Center	70	10.7	32.0	22.1	-	17.9

TABLE V-17

HIGHEST DEGREE BEYOND HIGH SCHOOL BY TEACHING STATUS AND TYPE OF SCHOOL  
(In Percentages)

	N	None	A.A.	B.A.; B.Ed.	M.A.; M.Ed.	Ph.D.; Ed.D.	Other
TOTAL	2,015	8.7	2.6	18.2	60.4	4.9	4.1
<u>Total Full-Time</u>	1,532	9.2	3.0	17.0	62.2	3.9	3.6
Branch Campus	69	-	-	6.6	76.2	17.1	-
Junior College	1,072	4.5	1.2	9.6	76.3	4.4	3.1
Technical Institute	204	18.2	3.8	46.0	26.3	-	5.0
Voc-Tech Center	186	30.1	13.5	31.6	15.1	-	6.8
<u>Total Part-Time</u>	483	7.0	1.7	21.7	54.9	8.3	5.6
Branch Campus	51	-	-	11.1	67.3	18.4	3.1
Junior College	379	7.1	0.9	20.4	57.9	7.9	4.7
Technical Institute	26	-	14.7	48.4	33.8	-	3.0
Voc-Tech Center	26	26.4	-	40.5	12.2	-	20.9

TABLE V-18

CURRENT DEGREE WORK BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Yes	No
TOTAL	1,519	32.4	65.4
<u>Total Males</u>	1,092	34.2	63.6
Branch Campus	56	35.2	64.8
Junior College	767	29.3	68.4
Technical Institute	153	41.5	57.7
Voc-Tech Center	116	55.9	39.4
<u>Total Females</u>	427	27.5	70.4
Junior College	306	24.0	74.0
Technical Institute	51	39.8	53.4
Voc-Tech Center	70	34.1	65.9

TABLE V-19  
CURRENT DEGREE WORK BY TEACHING STATUS AND TYPE OF SCHOOL  
(In Percentages)

	N	Yes	No
TOTAL	2,015	29.6	68.0
<u>Total Full-Time</u>	1,532	32.1	65.7
Branch Campus	69	31.0	69.0
Junior College	1,072	27.8	70.0
Technical Institute	204	41.1	56.6
Voc-Tech Center	186	47.7	49.4
<u>Total Part-Time</u>	483	21.5	75.6
Branch Campus	51	20.4	79.6
Junior College	379	21.2	76.4
Technical Institute	26	26.6	70.9
Voc-Tech Center	26	23.4	61.4

TABLE V-20

TYPE OF DEGREE SOUGHT BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	A.A.	B.A.	B.Ed.	M.A.	M.Ed.	Ph.D.	Ed.D.	Other
<b>TOTAL</b>	488	3.1	22.1	0.6	27.2	5.7	31.5	7.6	2.2
<b>Total Males</b>	371	4.3	19.0	0.8	28.3	3.7	32.4	9.4	2.1
Branch Campus	20	-	-	-	10.7	-	89.3	-	-
Junior College	224	0.5	10.1	1.3	20.8	4.2	44.6	14.8	3.7
Technical Institute	63	4.0	28.2	-	56.7	6.8	4.4	-	-
Voc-Tech Center	64	17.9	46.3	-	31.9	1.3	-	2.5	-
<b>Total Females</b>	117	-	31.6	-	23.9	12.0	28.2	1.7	2.6
Junior College	73	-	22.1	-	22.6	4.1	44.7	2.6	3.9
Technical Institute	20	-	32.2	-	50.0	17.8	-	-	-
Voc-Tech Center	24	-	63.0	-	5.7	31.2	-	-	-

TABLE V-21

TYPE OF DEGREE SOUGHT BY TEACHING STATUS AND TYPE OF SCHOOL  
(In Percentages)

	N	A.A.	B.A.	B.Ed.	M.A.	M.Ed.	Ph.D.	Ed.D.	Other
TOTAL	593	2.9	18.7	0.7	27.2	6.1	33.9	8.1	2.4
<u>Total Full-Time</u>	491	3.1	22.0	0.6	27.1	5.9	31.5	7.5	2.2
Branch Campus	21	-	-	-	9.8	2.3	87.9	-	-
Junior College	297	0.4	13.0	1.0	21.3	4.2	44.6	11.8	3.7
Technical Institute	83	3.0	29.0	-	55.0	9.3	3.7	-	-
Voc-Tech Center	88	13.0	50.8	-	24.8	9.4	-	1.8	-
<u>Total Part-Time</u>	102	2.4	2.7	1.3	27.4	7.3	44.9	11.1	2.9
Branch Campus	9	-	-	-	13.5	-	51.9	34.6	-
Junior College	80	3.1	3.5	1.7	23.6	6.2	49.3	10.1	2.5
Technical Institute	7	-	-	-	49.9	36.8	13.4	-	-
Voc-Tech Center	6	-	-	-	72.4	-	11.5	-	16.1

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TABLE V-22

ADDITIONAL NONDEGREE TRAINING BY SEX AND TYPE  
OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Yes	No
TOTAL	1,519	39.4	56.1
<u>Total Males</u>	1,092	40.0	56.2
Branch Campus	56	28.4	68.8
Junior Campus	767	37.4	59.3
Technical Institute	153	47.2	48.1
Voc-Tech Center	116	53.1	40.7
<u>Total Females</u>	427	38.9	55.9
Junior College	306	33.0	60.2
Technical Institute	51	39.9	59.8
Voc-Tech Center	70	63.4	29.4



TABLE V-23  
TYPE OF ADDITIONAL NONDEGREE TRAINING BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Course Work	Seminar Lecture	Institute Workshop	In-Field Training	Other
TOTAL	557	64.4	7.4	16.0	9.6	2.6
<u>Total Males</u>	405	63.7	7.7	15.6	11.1	2.2
Branch Campus	11	64.7	4.6	16.1	14.7	-
Junior College	265	65.4	10.4	12.8	8.3	3.2
Technical Institute	67	66.9	2.8	14.6	15.8	-
Voc-Tech Center	62	54.0	1.8	27.2	15.6	1.3
<u>Total Females</u>	152	65.8	6.6	1.8	0.6	0.3
Junior College	95	61.0	10.0	18.1	5.5	5.5
Technical Institute	19	68.3	5.2	17.9	8.6	-
Voc-Tech Center	38	76.0	-	17.4	6.5	-

TABLE V-24

MOST VALUABLE TYPE OF INSERVICE TRAINING BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Course Work	Seminar Lecture	Institute Workshop	In-Field Training	Other
<b>TOTAL</b>	820	32.9	28.4	23.3	12.3	3.8
<u><b>Total Males</b></u>	584	36.0	26.0	19.3	14.7	3.9
Branch Campus	38	37.2	19.7	26.4	5.6	11.2
Junior College	393	36.7	28.3	18.7	12.2	4.2
Technical Institute	89	30.3	29.1	17.3	20.0	3.4
Voc-Tech Center	64	38.7	12.2	20.9	28.2	-
<u><b>Total Females</b></u>	236	24.6	33.5	32.6	6.4	3.4
Junior College	171	24.6	39.6	26.3	6.2	3.5
Technical Institute	36	20.4	15.9	50.5	8.8	4.4
Voc-Tech Center	29	32.1	14.4	49.8	3.8	-

TABLE V-25

PREFERRED TIME OF INSERVICE TRAINING BY  
SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	School Year	Summer	School Year and Summer
TOTAL	1,027	54.0	38.4	7.7
<u>Total Males</u>	741	49.1	42.1	8.8
Branch Campus	39	31.5	54.9	13.5
Junior College	512	47.8	42.4	9.8
Technical Institute	106	59.0	32.3	8.7
Voc-Tech Center	84	52.4	46.4	1.2
<u>Total Females</u>	286	66.8	28.7	4.9
Junior College	208	65.2	30.1	4.7
Technical Institute	41	79.0	21.0	-
Voc-Tech Center	37	64.1	26.0	9.9

TABLE V-26

TOTAL YEARS OF TEACHING EXPERIENCE BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	1 Year or Less	Years			Median	Mean
			2-3	4-9	10-19		
					20 or More		
TOTAL	1,519	8.1	16.4	39.1	24.0	10.5	7.77
							9.22
<u>Total Males</u>	1,092	8.5	16.8	38.1	25.1	10.3	7.80
Branch Campus	56	1.8	26.9	39.3	16.1	12.5	7.00
Junior College	767	7.0	13.2	37.4	29.3	11.8	8.67
Technical Institute	153	12.4	26.8	40.5	13.7	5.9	5.55
Voc-Tech Center	116	16.2	22.2	38.5	16.2	6.0	5.73
							7.01
<u>Total Females</u>	427	7.3	15.9	41.7	21.4	10.9	7.64
Junior College	306	7.2	16.0	38.5	24.7	11.8	8.04
Technical Institute	51	7.0	6.8	54.4	17.0	9.8	7.64
Voc-Tech Center	70	8.1	19.7	45.8	13.5	9.9	6.63
							8.06

TABLE V-27

TYPE OF SCHOOL TAUGHT PREVIOUSLY BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	High School	Junior College	Technical Institute Voc-Tech Center	4-Year College University	Other Educational Institution
TOTAL	1,519	46.3	65.4	30.7	25.8	21.2
<hr/>						
Total Males	1,092	52.4	66.2	29.8	26.2	8.7
Branch Campus	56	41.1	35.7	5.6	66.1	28.4
Junior College	767	53.7	90.0	8.6	29.6	18.7
Technical Institute	153	39.2	7.1	92.8	9.3	11.7
Voc-Tech Center	116	15.4	1.4	97.0	7.1	14.3
<hr/>						
Total Females	427	44.8	63.7	32.8	25.0	23.0
Junior College	306	45.8	86.9	11.4	30.4	27.3
Technical Institute	51	45.9	1.4	88.4	8.4	33.6
Voc-Tech Center	70	38.6	6.4	85.3	-	10.1

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TABLE V-28

EMPLOYMENT OUTSIDE EDUCATION BY SEX AND TYPE  
OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Yes	No
TOTAL	1,519	73.3	25.2
<u>Total Males</u>	1,092	73.7	25.0
Branch Campus	56	54.0	46.0
Junior College	767	69.3	29.4
Technical Institute	153	89.1	10.9
Voc-Tech Center	116	93.0	3.7
<u>Total Females</u>	427	71.7	25.9
Junior College	306	65.3	33.0
Technical Institute	51	82.2	12.8
Voc-Tech Center	70	93.0	4.3

TABLE V-29  
TOTAL YEARS SPENT IN FULL-TIME EMPLOYMENT OUTSIDE EDUCATION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	1-2	3-5	6-9	10-14	15-19	20 and More	Median	Mean
<b>TOTAL</b>	1,012	23.3	22.9	15.0	13.2	9.1	16.8	7.02	9.33
<b>Total Males</b>	734	21.4	21.1	15.1	13.8	8.7	20.0	7.98	9.98
Branch Campus	28	6.3	42.2	13.4	22.8	11.6	3.6	6.00	8.20
Junior College	479	27.3	23.6	14.8	12.5	6.6	15.1	5.87	8.54
Technical Institute	126	10.9	19.8	14.1	16.2	11.6	27.4	11.63	12.19
Voc-Tech Center	101	9.9	4.1	17.4	15.8	13.9	38.9	15.89	14.67
<b>Total Females</b>	278	28.4	27.7	14.7	10.8	10.1	8.3	5.34	7.56
Junior College	179	27.0	31.5	13.5	12.1	8.9	7.1	5.21	7.33
Technical Institute	36	34.8	17.5	25.3	7.0	1.8	13.5	5.75	7.54
Voc-Tech Center	63	31.3	21.7	12.5	9.9	17.2	7.5	5.68	8.24

TABLE V-30  
PRINCIPAL OCCUPATION PRIOR TO PRESENT JOB BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Undergraduate Student	Graduate Student	Housewife	Career Military Service	Different Job at this School	Staff Member in Another School	Employed Outside Education	Indeterminate
TOTAL	1,519	2.8	16.8	3.7	1.4	0.8	43.1	28.8	2.4
<u>Total Males</u>									
Branch Campus	1,092	2.8	17.3	-	2.0	0.9	43.8	31.0	2.0
Junior College	56	2.9	50.4	-	-	-	26.4	13.8	5.3
Technical Institute	767	1.6	20.0	-	1.0	1.0	50.9	23.8	1.9
Voc-Tech Center	153	4.0	5.0	-	3.4	1.8	32.9	52.1	0.8
	116	9.3	-	-	8.7	-	20.0	58.9	2.4
<u>Total Females</u>									
Junior College	427	2.6	15.4	13.1	-	0.7	41.4	23.4	3.4
Technical Institute	306	1.1	21.2	13.2	-	0.9	44.5	16.1	3.0
Voc-Tech Center	51	13.5	2.5	23.8	-	-	32.5	19.5	8.2
	70	1.0	-	5.4	-	-	35.4	57.6	-



TABLE V-31  
MAJOR OCCUPATIONAL EXPERIENCE OUTSIDE EDUCATION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Occupational Areas	
TOTAL	1,108 <sup>a</sup>	Business (40%) <sup>b</sup>	Skilled Trades (24%)
<u>Total Males</u>			
	797	Business (38%)	Skilled Trades (29%)
Branch Campus	30	Business (54%)	Skilled Trades (22%)
Junior College	525	Business (38%)	Skilled Trades (22%)
Technical Institute	135	Business (41%)	Skilled Trades (37%) Science or Engineering (24%)
Voc-Tech Center	107	Skilled Trades (56%)	Business (30%) Science or Engineering (20%)
<u>Total Females</u>			
	303	Business (44%)	Health Services (23%)
Junior College	196	Business (39%)	Health Services (25%)
Technical Institute	42	Business (55%)	Health Services (22%)
Voc-Tech Center	65	Business (52%)	Skilled Trades (29%)

<sup>a</sup>Base numbers include only those who have been employed outside education.

<sup>b</sup>Only those areas above 20 per cent are listed.

TABLE V-32  
FIRST CONSIDERATION OF EDUCATION AS A PROFESSION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Always Wanted to be a Teacher	During High School	When Choosing a College	During Under- graduate Studies	During Graduate Studies	In Military Service	After Starting Another Career	After Teaching Tempo- rarily	When Children Became Old Enough	After Retiring From Another Career	Do Not Plan to Make Edu- cation My Profession	Indeter- minate
TOTAL	1,519	11.4	12.5	3.8	23.6	8.8	5.4	20.5	5.7	1.8	1.6	2.2	3.0
Total Males	1,092	8.2	11.4	3.3	25.4	9.3	7.4	21.4	5.7	0.2	2.0	2.4	3.3
Branch Campus	56	10.4	12.3	2.9	24.0	25.7	5.7	7.8	3.8	2.9	0.9	-	3.8
Junior College	767	8.8	13.6	3.7	30.2	10.3	6.2	15.3	5.7	-	2.1	1.8	2.3
Technical Institute	153	4.9	7.4	1.8	14.7	5.1	6.8	39.4	7.9	-	1.9	6.2	3.9
Voc-Tech Center	116	7.2	3.0	0.9	9.4	0.6	17.9	45.8	3.2	-	1.8	1.8	8.8
Total Females	427	19.2	15.2	5.3	18.7	7.3	0.2	18.0	5.6	5.8	0.5	1.9	2.3
Junior College	306	21.7	12.7	4.3	19.2	9.7	0.3	13.4	5.8	8.2	0.6	1.2	2.9
Technical Institute	51	18.6	19.5	8.1	14.7	4.6	-	22.2	5.4	-	-	5.4	1.4
Voc-Tech Center	70	9.4	22.2	7.1	19.8	-	-	35.8	4.4	-	-	1.0	-

TABLE V-33  
REASONS FOR WORKING IN A TWO-YEAR INSTITUTION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Interest in this Level	Advancement	Personal Reasons	Suits Background	Innovative Institution	More Freedom than High School	Happen- stance	Less Pressure than 4-Year School	Temporary Job
<b>TOTAL</b>	1,305	34.9	16.1	14.9	14.6	7.3	5.6	3.9	2.2	0.5
<hr/>										
<b>Total Males</b>	928	33.7	16.5	14.4	14.4	7.4	5.9	4.4	2.7	0.5
Branch Campus	43	32.7	10.3	20.5	7.1	3.7	7.4	15.4	2.9	-
Junior College	648	36.2	16.7	14.3	11.4	6.0	6.8	4.3	3.7	0.7
Technical Institute	135	29.9	18.9	13.3	19.9	8.7	6.1	3.2	-	-
Voc-Tech Center	102	24.6	16.1	13.5	29.0	15.3	-	1.5	-	-
<hr/>										
<b>Total Females</b>	377	38.0	15.0	16.1	15.0	6.9	4.7	2.6	1.1	0.5
Junior College	272	40.6	13.6	17.7	10.1	6.9	6.2	2.7	1.4	0.8
Technical Institute	45	33.3	12.3	21.5	17.1	6.8	1.4	7.5	-	-
Voc-Tech Center	60	30.9	22.6	4.9	35.4	6.2	-	-	-	-

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TABLE V-34

ADEQUACY OF PREPARATION BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(Per cent Answering "Good")<sup>a</sup>

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N	Subject Matter Preparation for Major Assignment	Managing Classroom Routine	Subject Matter Preparation for Other Assignments	Motivating Students to Learn	Working as a Member of an Educational Team	Making Curriculum Relevant to Students	Utilizing Innovative Teaching Methods	Preparing Material for the Above Average Student	Advising Students About Course Selections	Understanding Students from Another Cultural Background	Advising Students About Personal Problems	Working with Community Leaders	Working in an Administrative Bureau	Preparing Material for the Slow Learner	
TOTAL	1,477	71.5	47.4	44.0	35.9	34.4	33.5	30.0	29.8	27.2	26.9	22.0	20.4	13.1	12.8
<b>Total Males</b>															
1,068	70.3	44.3	44.0	33.7	33.3	31.7	27.8	29.4	27.0	24.1	21.2	18.6	13.7	12.0	
Branch Campus	56	80.1	36.0	55.8	30.1	26.9	31.0	26.3	38.7	43.6	22.9	16.5	21.0	11.5	
Junior College	755	76.2	45.3	47.2	33.7	32.9	30.6	26.3	32.2	27.0	21.9	17.4	13.1	11.3	
Technical Institute	145	56.9	48.1	36.3	30.9	35.5	32.7	33.7	19.1	24.7	22.0	19.5	12.7	13.0	
Voc-Tech Center	112	43.7	36.8	28.0	39.6	36.5	38.5	31.4	19.1	22.2	15.1	26.4	15.5	16.1	
<b>Total Females</b>															
409	74.3	55.1	43.8	41.2	37.5	38.3	35.9	30.7	28.0	34.3	24.0	25.1	11.8	14.9	
Junior College	296	77.7	54.2	46.9	44.4	40.4	34.9	37.2	33.4	33.4	27.1	24.4	14.3	17.9	
Technical Institute	50	55.5	60.7	22.7	38.6	44.8	31.9	18.8	17.5	41.2	21.9	29.0	1.2	14.2	
Voc-Tech Center	63	73.9	55.5	46.0	29.4	22.3	42.9	10.5	11.1	32.6	11.7	26.2	7.4	1.3	

<sup>a</sup>Other response options were adequate, inadequate, and none.

TABLE V-35  
DESIRED CHANGES IN STUDENT BODY BY SEX AND TYPE OF SCHOOL  
(Per cent Answering "Yes")

	N	No Changes	Higher Academic Standards	More Minority Groups	All Types; Cross- Section	More Technical Students	Fewer Radicals	Be a Community College	More Transfer Students	Other
TOTAL	1,324	42.8	29.8	7.7	6.0	4.3	3.5	3.0	1.0	2.0
<b>Total Males</b>										
Branch Campus	945	42.3	30.1	7.3	6.7	4.7	3.2	2.5	1.0	2.2
Junior College	44	37.4	23.3	6.3	13.8	3.6	-	3.6	-	12.0
Technical Institute	672	42.5	26.8	8.6	8.7	4.0	3.8	2.4	1.3	1.9
Voc-Tech Center	137	50.7	30.5	5.5	-	4.9	2.7	4.6	-	1.2
	92	31.1	57.2	-	-	9.5	-	-	1.1	1.1
<b>Total Females</b>										
Junior College	379	43.8	28.9	8.7	4.2	3.1	4.5	4.2	1.0	1.6
Technical Institute	274	41.8	28.9	12.0	4.0	3.5	3.9	3.4	1.2	1.5
Voc-Tech Center	46	52.8	23.1	-	5.0	5.3	1.5	8.8	-	3.4
	59	45.8	33.7	-	5.7	-	9.2	4.3	1.4	-

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TABLE V-36  
PER CENT REPORTING "VERY SATISFIED" WITH ASPECTS OF JOB BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY<sup>a</sup>  
(In Percentages)

	N	Report With Students	Report With Teaching Colleagues	Job Security	Reputation of School	Report With Administrative Colleagues	Job Prestige	Opportunity for Professional Meetings	Intellectual Atmosphere	Opportunity for Inservice Training	Opportunity for Research
TOTAL	1,437	65.3	50.2	45.4	39.1	34.5	32.2	27.9	20.5	16.6	12.6
<hr/>											
Total Males	1,034	65.0	49.1	44.4	38.5	34.0	31.8	26.9	20.6	16.6	12.7
Branch Campus	51	73.2	55.8	47.4	35.7	47.0	44.6	37.6	11.0	1.2	11.1
Junior College	728	67.5	50.6	46.2	37.7	31.8	29.7	26.7	20.0	14.3	11.3
Technical Institute	149	60.8	46.3	38.0	40.6	34.5	27.7	21.3	20.0	17.1	12.5
Voc-Tech Center	106	51.6	39.6	39.3	42.4	40.8	45.3	30.3	30.2	35.2	20.6
<hr/>											
Total Females	403	66.2	53.1	47.9	40.4	36.0	33.1	30.4	20.1	16.5	12.4
Junior College	291	66.7	53.4	48.1	39.6	34.8	32.5	34.0	19.1	18.0	13.8
Technical Institute	42	76.8	66.5	57.3	42.4	50.2	42.0	30.4	33.9	21.9	11.6
Voc-Tech Center	70	55.0	43.1	41.7	41.3	30.1	30.4	13.0	14.6	5.5	5.3

<sup>a</sup>Other response options were satisfied, dissatisfied, and no opinion.

TABLE V-37

LONG RANGE CAREER PLANS BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

	N	Continue in Same Type of Job	Stay in Education; in Different Type Job	Leave for Homemaking; Would Like to Return	Leave Education for Another Occupation	Indeter- minate
TOTAL	1,519	63.7	21.1	3.6	5.4	6.2
<hr/>						
<u>Total Males</u>	1,092	63.4	23.5	-	6.5	6.7
Branch Campus	56	61.0	22.6	-	5.7	10.6
Junior College	767	65.8	22.8	-	5.2	6.2
Technical Institute	153	58.3	27.1	-	9.6	5.0
Voc-Tech Center	116	55.2	23.7	-	10.9	10.2
<hr/>						
<u>Total Females</u>	427	64.4	15.0	12.9	2.6	4.9
Junior College	306	63.5	13.8	14.0	2.5	6.2
Technical Institute	51	65.5	16.4	10.0	6.4	1.7
Voc-Tech Center	70	68.4	20.0	10.4	-	1.2

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TABLE V-38  
PER CENT REPORTING ADEQUACY OF INSTITUTIONAL SERVICES BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(Per Cent Answering "Above Average" or "Excellent")<sup>a</sup>

N	Quality of Vocational Instruction	Quality of Academic Instruction	Suitability of Academic Courses for State College	Suitability of Vocational Courses for Local Job Market	Board of Trustee Support for Vocational Programs	Suitability of Vocational Courses for Further Training	Board of Trustee Support for Academic Programs	Suitability of Academic Courses for Major University	Job Placement Service	Provisions for Student Loans	Provisions for Student Scholarships	Vocational Counseling	Academic Counseling	Remedial, Tutorial Services
TOTAL	70.2	67.8	67.0	63.8	61.6	59.4	57.2	56.2	36.6	34.4	32.1	31.2	29.1	27.8
Total Males														
Branch Campus	68.4	68.0	67.6	60.8	60.9	58.8	57.3	58.0	35.8	32.0	29.8	30.5	28.8	25.9
Junior College	31.7	58.3	77.3	31.0	37.6	33.6	48.1	64.5	33.7	22.2	18.4	33.4	42.9	20.9
Technical Institute	68.9	71.5	73.1	62.7	65.2	60.3	58.5	63.5	32.2	33.8	32.8	28.8	29.0	28.3
Voc-Tech Center	78.6	64.5	37.9	69.3	59.3	59.0	63.0	24.4	54.2	33.4	26.6	37.2	24.9	24.4
	61.7	49.0	35.5	45.5	39.5	56.6	36.5	34.3	27.9	14.4	9.5	29.9	22.6	9.3
Total Females														
Junior College	75.3	67.2	66.2	71.8	63.8	61.2	57.0	54.7	39.8	41.8	38.3	33.1	30.2	32.8
Technical Institute	72.6	71.6	74.4	67.5	69.5	62.0	63.3	62.5	35.3	43.4	41.9	33.8	31.6	35.0
Voc-Tech Center	92.8	69.8	35.3	82.9	61.8	70.6	48.5	17.0	52.6	52.2	40.1	48.0	37.6	29.9
	70.8	43.5	22.9	78.3	35.5	51.3	19.8	19.2	43.9	15.9	12.0	20.4	17.2	18.5

<sup>a</sup>Other response options were average, below average, unsatisfactory, not applicable to this school, and no opinion.



TABLE V-39

**RESPONSIBILITY IN MAJOR DECISION AREAS BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY**  
(In Percentages)

N	Individual Teacher		Faculty Committee	Responsibility Agreed to be Central Administration										No Consensus	
	Specific Course Content	Student Evaluation Procedures		Curricula Planning and Development	Selection of New Faculty	Budget Planning	Admission Criteria	Faculty Promotions	Faculty Evaluation Procedures	Degree-Certificate Requirements	Resolution of Student Grievances	Resolution of Faculty Grievances	School Philosophy and Goals	Selection of Administration	Faculty Salaries and Fringe Benefits
<b>TOTAL</b>	1,334	62.1	52.1	58.3	80.4	77.7	76.6	75.9	71.9	66.7	63.9	61.8	57.6	47.6 <sup>a</sup>	42.8 <sup>a</sup>
<b>Total Males</b>	967	65.2	52.1	56.5	81.1	79.8	76.7	78.5	73.4	67.2	64.6	64.0	59.0	50.4 <sup>b</sup>	44.8 <sup>b</sup>
Branch Campus	47	51.4	48.6	72.4	84.6	100.0	73.5	85.5	72.6	54.3	74.4	71.3	53.4	60.3 <sup>b</sup>	84.8 <sup>b</sup>
Junior College	679	67.8	53.0	61.8	77.8	77.4	74.9	82.2	70.5	66.1	66.1	60.1	54.0	49.9 <sup>a</sup>	44.4 <sup>c</sup>
Technical Institute	144	56.1	47.1	42.0	86.1	83.5	84.0	76.9	77.9	69.8	65.8	68.8	70.6	53.2 <sup>c</sup>	60.9 <sup>b</sup>
Voc-Tech Center	97	66.8	55.6	35.1	94.3	82.2	79.6	89.8	88.9	76.8	47.6	82.6	80.5	53.7 <sup>b</sup>	53.6 <sup>b</sup>
<b>Total Females</b>	367	54.5	52.4	63.3	79.2	71.9	75.6	70.2	68.4	65.5	61.7	55.9	55.7	56.8 <sup>c</sup>	46.4 <sup>a</sup>
Junior College	250	56.8	50.8	64.6	78.6	69.7	74.8	71.7	64.8	63.0	63.1	50.0	51.0	52.7 <sup>c</sup>	46.3 <sup>c</sup>
Technical Institute	48	53.4	64.2	64.6	72.4	70.8	75.2	60.7	59.0	80.5	53.1	53.3	57.8	72.3 <sup>c</sup>	39.6 <sup>b</sup>
Voc-Tech Center	59	51.0	51.0	54.0	84.9	81.5	82.5	65.2	84.4	60.3	62.2 <sup>c</sup>	79.4	57.4	68.3 <sup>c</sup>	61.2 <sup>c</sup>

<sup>a</sup>Rated equally as a responsibility of both central administration and board of trustees.

<sup>b</sup>Responsibility of central administration.

<sup>c</sup>Responsibility of board of trustees.

TABLE V-40

PER CENT ENDORSING FUTURE INSTITUTIONAL ROLES BY SEX AND TYPE OF SCHOOL--FULL-TIME FACULTY  
(In Percentages)

N	Increase Number of Adult Education Courses	Increase Number of Occupational Programs	Increase Number of Remedial Offerings	Specialize in Occupational Training for Local Job Market	Increase Number of Transfer Programs	Specialize in Preparing Students for Any University	Accept Only High School Graduates	Specialize in Occupational Training, Not Necessarily for this Area	Accept Any Student	Specialize in Preparing Students for State University	Open Additional Campuses	Become a 4-Year College	Accept Only Upper Half of High School Graduates	Other	
	79.3	78.6	76.0	62.9	59.1	57.2	53.9	52.7	41.8	41.7	38.0	14.6	9.6	7.6	
TOTAL	1,385														
<hr/>															
Total Males	1,024														
Branch Campus	47	79.9	78.4	74.7	61.8	59.2	55.7	52.1	53.7	43.0	41.6	38.9	15.5	10.2	7.9
Junior College	734	86.8	54.3	52.8	27.6	60.9	74.7	57.2	39.6	24.2	56.9	11.0	52.5	35.7	6.4
Technical Institute	146	78.7	77.4	74.8	56.1	61.8	67.3	49.2	45.3	45.2	48.2	43.7	17.4	8.9	7.5
Voc-Tech Center	97	78.7	83.2	76.6	83.1	53.8	20.1	64.2	81.7	36.0	22.7	26.5	4.7	6.0	9.7
		86.2	91.9	81.2	90.0	47.1	11.4	53.4	82.3	46.0	11.2	34.2	-	14.7	9.5
Total Females	361														
Junior College	271	77.6	78.7	79.8	65.9	59.0	61.5	59.0	49.9	38.5	42.1	35.4	11.9	7.6	6.6
Technical Institute	41	75.4	75.4	79.0	57.2	63.3	69.5	56.1	41.5	41.9	48.0	41.1	14.6	8.9	6.9
Voc-Tech Center	49	78.1	90.9	75.2	86.1	48.3	33.9	62.0	78.8	38.5	15.6	18.4	3.3	6.8	10.3
		90.5	87.7	87.8	98.7	43.3	41.3	73.1	74.2	17.9	31.9	18.8	3.5	1.6	0.7

TOTAL

Total Males

Branch Campus

Junior College

Technical Institute

Voc-Tech Center

Total Females

Junior College

Technical Institute

Voc-Tech Center

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## VI. IMPLICATIONS FOR FUTURE RESEARCH

The educational philosophies of the two-year postsecondary, publicly supported nonbaccalaureate institutions included in this first phase of our study varied widely. The branch campuses concentrated heavily on preparing students for transfer to four-year colleges. Junior colleges and technical institutes tended to serve a dual purpose, offering both transfer and terminal programs. The vocational-technical centers strongly emphasized immediate job preparation.

In spite of these differences in educational philosophies, however, the findings of the follow-up component of the study indicated that a considerable proportion of the graduates of two-year postsecondary institutions are bound for four-year colleges. Generally, students from academically oriented schools were more likely to continue with additional education, including enrollment in a four-year college, than students in occupational schools. However, the results indicated that even in such occupationally-oriented schools as technical institutes, about half of the male associate-degree graduates continued with their education, and of this group, 60 per cent went on to a four-year college.

There was evidence to indicate that the two-year colleges served as a vehicle for upward mobility for persons seeking further education on a part-time basis, persons from small-town or rural backgrounds, and for the white lower-middle class. Not only were more students from lower-middle class backgrounds than from higher socioeconomic backgrounds enrolled in the two-year colleges, but in addition, the former had a tendency to graduate more frequently than the latter.

It appeared that the occupational program's best-served clientele were low-income white males, predominantly residents of suburbs or small towns, including many with a consistent vocational-technical orientation (e.g., high school curriculum in vocational-technical subjects, and low interest in academic subjects) who were comfortable and successful in technical institutes or vocational-technical centers. For these students, the program paid off in jobs and wages. The transfer program was just as successful, enabling the great majority of its male students to go on to a four-year college without loss of credits.

The findings regarding the women were not as clear as the ones discussed above. There was some evidence to indicate that the two-year colleges helped train the disadvantaged older women who had been divorced, separated or widowed. The need for occupational training for women was evidenced by the fact that more women than men tried to secure a job immediately after graduation. Those who did enroll in four-year colleges preferred occupationally-oriented schools over purely academic schools. However, although the employment rate for the graduates was very high, there was some evidence that the occupational pay-off of the programs was not as high for the women graduates as for the men.

In general, however, finding work was not a problem for the graduates. The unemployment rate of the graduates was lower than the national statistics for their age group, and the overall rate of switching from one type of work to another was very low.

It can be said that the provision of very low-cost postsecondary education enabled quite a respectable number of students to proceed with further educational pursuits or to find gainful employment.

Some problem areas also emerged from the findings. For instance, both the students and faculty displayed some dissatisfaction with the counseling provided. It appeared as if the junior college was more successful with the well-oriented, highly- and clearly-motivated students, and less successful in helping the undecided to define their goals. It also seemed as if the two-year postsecondary institutions might be duplicating the "errors" of high schools in placing too much emphasis on a baccalaureate education. On the part of the student, there was too much continuity between high school program and the two-year college program to indicate that much "rethinking" took place. However, more longitudinal data are needed to find out about the rates of program changes or dropping-out.

It is the purpose of the second phase of the study to provide answers in many of these areas for which the first phase raised questions without providing authoritative answers. Perhaps the most pressing assignment is to determine the extent to which the junior college has actually performed the "second chance" function which its proponents claimed it was uniquely qualified to carry out. Have these institutions made a significant contribution in assisting the disadvantaged student, the older student, and the academically handicapped? And how much of a mission do college administrators and faculty truly feel that they have been charged with in this area? Again, the findings from Phase I are merely suggestive, but data from the faculty section suggest that the faculty as a whole would like to see the junior and community colleges become more selective and adhere to higher academic standards in the future. These goals, while only too understandable given the channels of faculty recruitment and the aspirations of present staff members,

are not likely to serve the needs of many young and not so young Americans for whom these institutions held out initial promise.

Much useful follow-up data on these issues will emerge from Phase II. It may be desirable to enlarge somewhat the original sampling of institutions and students, in order to improve coverage of nonrural, nonsuburban, nonyoung and part-time students, so as to be able to obtain as extensive a charting for these groups as our original design has apparently yielded for the white, small-town, low-income youths for whom we can say confidently that the colleges are performing a valuable educational service.

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## APPENDIX A

### METHODOLOGY

The first phase of the study consisted of a mail survey and subsequent analysis of data from two-year institutions, their students, graduates, and faculty. In addition, data tapes and address files were maintained for the second phase of the study which involves a longitudinal analysis of career patterns of students in different institutions.

This appendix provides a description of the sampling plan and the data collection procedures used in the first phase of the study.

#### Sampling Design

A two-stage sampling design was used, first providing a stratified sample of schools, and then a selection of respondents within the selected schools. The sample of students was unweighted since each student had an equal chance of being selected. The sample of faculty and the sample of graduates were initially planned to be self-weighting but due to lack of adequate information at the time the samples were drawn, adjustive weights had to be introduced (see explanation below).

#### Sample of Schools

First a universe of approximately 1,200 schools offering a more or less extensive program of postsecondary education was identified through examination of several pertinent sources: the AAJC Directory,

American Junior Colleges, Directory of Schools Offering Technical Education Programs, Opening Fall Enrollment in Higher Education 1967, Lovejoy's Vocational School Guide, Technician Education Yearbook 1967-68, state educational directories, National Association of State Universities and Land-Grant Colleges list of branch campuses, OE list of Eligible Institutions for National Vocational Student Loan Insurance Act of 1965, Barrons Guide to the Two-Year College, Directory Vocational Education Programs 1966, OE Directory of U. S. Institutions of Higher Education - Fall 1967, AAJC list of new colleges and report on junior college planning and development, and OE Area Vocational Education Schools Reported in Projected Program Activities Fiscal Year 1968.

It had already been decided that the number of schools to be included in the survey was going to be about 100. Therefore, the universe of schools obtained from the above sources was grouped into 100 strata of approximately equal size. The following modes of stratification were used:

1. Type of school.

a) Branch campus. A two-year institution which offers a program acceptable toward the baccalaureate and is directly affiliated with a state university and recognized as such by both the two-year college and the parent institution.

b) Junior college. A two-year institution offering a program acceptable toward the baccalaureate. It may also offer terminal occupational, liberal arts, and general courses.



c) Technical institute. A two-year institution requiring a high school diploma or its equivalent for entrance which emphasizes occupational programs. It may offer liberal arts programs, but does not usually offer a complete transfer program.

d) Vocational-technical center. A school which offers occupational programs almost exclusively. It differs from a technical-institute both in the extent of the emphasis on occupational programs and in that it does not require a high school diploma for admission.<sup>1</sup>

2. Geographical location.--The Bureau of the Budget 1967 definitions of standard metropolitan statistical areas and central cities was followed to locate schools in the central city of a SMSA, other parts of a SMSA, or outside of a SMSA.

3. Student body size.--Within each type and location designation schools were ordered by the most recently available enrollment figures (usually fall 1968) in order to develop strata that were relatively homogeneous in size (e.g., 1,000-2,499; 2,500-4,999, etc.).

4. Geographical dispersion.--Where there was more than one stratum of schools of similar size within a type-location group, the strata were split into groups of contiguous states in order to assure geographical dispersion among the sample institutions.

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<sup>1</sup>This classification system proved to be a valid one. There was almost unanimous agreement among the 95 sample institutions between the self-designation given on the Institutional Data Form and the category to which we assigned the school. The three discrepancies were decided in favor of the institutional self-image. Further, as described in Section II of this report, each type of institution perceived its role in the total system of higher education in a somewhat different way as was expected.

Since the study design called for 100 schools, dividing this number into the estimated 2,000,000 students in public two-year colleges and vocational-technical centers indicated cells of approximately 20,000 students each. The junior college cells met this criterion. Cell sizes for the other three types of schools, which consistently had smaller enrollments than the junior colleges, were reduced to 10,000 in order to provide sample representation proportionate to their numbers in the total population. As a result, there were 110 strata in the original sampling plan. Each school was then selected with probability proportionate to the size of its student body to represent each cell.

Table A-1 presents a comparison between the original sampling plan and the final sample of 95 schools.

TABLE A-1  
COMPARISON OF ORIGINAL SAMPLING PLAN AND FINAL SAMPLE  
OF POSTSECONDARY INSTITUTIONS

	Total	Branch Campus	Junior College	Technical Institute	Voc-Tech Center
TOTAL	95 (110)	4 (6)	62 (67)	16 (22)	13 (15)
Central city (SMSA 1)	44 (46)	2 (3)	30 (30)	7 (9)	5 (4)
Suburban (SMSA 2)	21 (28)	2 (2)	19 (20)	0 (4)	0 (2)
Outside SMSA (SMSA 3)	30 (36)	0 (1)	13 (17)	9 (9)	8 (9)

Note: Figures in original sampling plan are given in parentheses below the sample figures. The discrepancy in numbers in Voc-Tech Center column in terms of original sampling plan and final sample plan of schools in central city is due to some of the corrections that had to be made in the classification system. See footnote 1 on page 247.

The reduction by 15 schools is attributable to two factors: (a) five cells disappeared as it was discovered that certain groups of schools were not primarily two-year postsecondary institutions. Several branch campuses, notably in Massachusetts and Indiana had become or were in the process of becoming four-year institutions; several of the purported postsecondary vocational centers proved to be primarily oriented toward the high school student; (b) ten cells were not filled because selected schools declined to participate and could not be replaced.

#### Student Sample

The basic sampling rate for students was the quotient of the predesignated sample size for students divided by the estimated size of the total population of students, i.e., the student sample was drawn randomly from the selected school on a sampling ratio of 1:133 students in the cell, or 150 for a cell of 20,000 students. This procedure yielded a sample of 12,620 students for the survey.

#### Faculty Sample

In the selection of the faculty sample, in the absence of information on faculty membership at each institution, a sample size was determined for each cell in the ratio of 50 faculty members per 20,000 students.<sup>2</sup> This procedure would have yielded an unweighted sample of faculty members, if, indeed, the ratio of faculty-students were constant in all institutions. Since, obviously, this condition is not met

<sup>2</sup>Fifty was chosen as a manageable number--yielding enough faculty representation from each school without requiring the participation of every faculty member in the school.

in the universe of institutions, subsequent compensatory weights were applied to the faculty sample after we were able to determine the faculty population values at the selected institutions.

To illustrate this procedure:

Let  $P_i$  be the actual probability of the  $i^{\text{th}}$  faculty member.

$$\text{Then: } P_i = P_c(P_{i|c})$$

where  $P_c$  is the probability that the  $i^{\text{th}}$  faculty member's institution will be selected and  $P_{i|c}$  will be the conditional probability of choosing the  $i^{\text{th}}$  faculty member, given that this institution has been selected. Since

$$P_c = \frac{\text{Number of students in the selected institution}}{\text{Number of students in one stratum}}$$

and since  $P_{i|c}$  will be variable because of lack of prior information, it follows that in general

$$P_i \neq P_j$$

That is, faculty members at different institutions will indeed have been given different probabilities. Therefore, it is necessary to derive weights such that

$$P_i W_i = P_j W_j$$

These weights can, of course, be scaled to any level. Usual practice is to scale the adjustive or compensatory weights in such a way that the weighted sample size as reported is approximately equal to the original sample size, so as to avoid misunderstanding; this is most often accomplished by setting the sum of the weights equal to 1.0.

In this study, the total weighted sample (2,286) is approximately four per cent smaller than the unweighted sample (2,377); thus, on the average, the weighted sample sizes shown in the tables in Section V of this report are slight underestimates of the actual sample sizes.

### Graduate Sample

A similar procedure was followed for the sample of graduates. The sample size for each selected school was based on an estimate of the size of the 1967 graduating class (the group chosen for study). Subsequently, more accurate information on the size of that graduating class was received from some schools. Thus, it was possible to derive adjustive weights to compensate for inequality of probability among graduates. Where a school did not, or could not, provide accurate counts on the size of the 1967 graduating class, adjustive weights were based on refined estimates derived from the ratio of graduates to enrollees in similar schools.

### Data Collection Procedures and Response Rates

Letters were sent to the presidents of the 110 selected institutions asking for their cooperation in the study. Enclosed with each letter were an abstract explaining the study design, a packet of sample materials, and a request that the president appoint a campus coordinator to work with us throughout the study. Personal telephone calls were made at designated intervals to each president and coordinator to clarify procedures, confirm participation, convince the wavering, and establish general rapport.

The double approach of letter and telephone follow-up proved very successful both in achieving cooperation and shortening the time required to obtain the rosters for sampling.

Meanwhile four types of survey instruments were designed and pretested: (1) institutional forms, (2) student questionnaires, (3) graduate questionnaires, and (4) faculty questionnaires.

The campus coordinators, or liaison officers, were asked to provide a roster of students, faculty, and graduates for sampling. In addition, they were asked to complete the institutional forms.

An address file containing the names, addresses, and school affiliation of the individuals in the sample was established and updated as address changes were received from the post office. As an additional measure to increase the likelihood of future cooperation in successive stages of the study, each respondent was thanked and asked to return a postcard indicating where he could be reached during the next two or three years. These changes were also incorporated into the address files.

After the sampling was completed, a major effort was undertaken to contact the 12,620 students, 2,568 graduates, and 4,122 faculty members of the 95 two-year colleges participating in the study. The initial response rates to first mailing were 31 per cent from the student sample, 25 per cent from the faculty sample, and 19 per cent from the graduate sample. A follow-up letter and a second questionnaire were then sent to nonrespondents three weeks after the initial mail-out. The response rates increased to 47 per cent for students, 48 per cent for faculty and 41 per cent for graduates. The response rates for students and graduates after the first follow-up approximated those obtained in the pretest. The response rate for faculty was disappointingly low, probably due to the fact that the questionnaires were sent during the final weeks of school when the faculty was particularly busy. In addition one school which had been requested to distribute the questionnaires to the students and the faculty failed to do so and refused to respond to our requests.

A second follow-up was undertaken for students and graduates in the summer. The faculty was not contacted at that time as the majority of them could not be reached at school addresses. Finally, a third follow-up was attempted in the fall, bringing the response rates to 61 per cent for the students, 57 per cent for the graduates, and 58 per cent for the faculty. In addition, 84 per cent of the campus coordinators or administrators completed and returned the institutional forms. Response rates by type of school and class of respondents are shown in Table A-2. These are usable response rates. Another four per cent of the student, two per cent of the graduates, and one per cent of the faculty replied, but were not included in the study because they were not students or teachers at the selected school during the spring of 1969 or had not graduated in June of 1967 or, in the case of graduates, replied for the college they were now attending. An additional source of attrition was the proportion of unreachables. Despite the use of first class mail, postal address change services, and attempts by the school liaison to correct outdated addresses, three per cent of the student questionnaires and six per cent of the graduate questionnaires were returned by the post office as unforwardable. Experience with previous surveys has shown that the proportion of the nonreached generally runs much higher than these figures. In addition, the refusal rate was very low: only one per cent in each group refused to participate in the study.

Inspection of Table A-2 reveals some inconsistencies in response rates by type of school, the most serious of which was the relatively low response from graduates of technical institutes and vocational-technical centers.

TABLE A-2

RESPONSE RATES BY TYPE OF SCHOOL AND CLASS OF RESPONDENT

	Sample	Usable Returns	Per Cent
<u>Students</u>	<u>12,620</u>	<u>7,673</u>	<u>60.8</u>
Branch Campus	679	444	65.4
Junior College	9,673	5,867	60.7
Technical Institute	1,366	830	60.8
Voc-Tech Center	902	532	59.0
<u>Graduates</u>	<u>2,568</u>	<u>1,456</u>	<u>56.7</u>
Branch Campus	42	26	61.9
Junior College	2,018	1,204	59.7
Technical Institute	283	149	52.6
Voc-Tech Center	225	89	40.0
<u>Faculty</u>	<u>4,122</u>	<u>2,377</u>	<u>57.7</u>
Branch Campus	198	108	54.5
Junior College	3,242	1,831	56.5
Technical Institute	389	263	67.6
Voc-Tech Center	293	175	59.7
<u>Administrators</u>	<u>95</u>	<u>80</u>	<u>84.2</u>
Branch Campus	4	2	50.0
Junior College	62	52	83.9
Technical Institute	16	15	93.8
Voc-Tech Center	13	11	84.6

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The downward progression of response from the most academically oriented schools (the branch campuses) to the least academic (the vocational-technical centers) suggests that the more academically inclined were more likely than others to respond to mail questionnaires. This argument is counterbalanced somewhat, however, by the fact that the nondelivery of mail was highest for these two groups. The occupational schools as a group found it more difficult to furnish us with up-to-date addresses than either the branch campuses or the junior colleges.

The 35-40 per cent residual nonresponse rate was considered significant enough to warrant a special study of nonrespondents which is described in Appendix B. Basically, the student groups exhibited no significant differences across SMSA categories, type of school attended, degree of participation in the school program, and attitudes toward the school. The comparison of graduate groups also showed little difference on location, demographic, and school participation variables. However, for both the student and graduate group, a trend was detected indicating the possibility that the data on which the report is based might under-represent academically and socioeconomically poor students. No such differences were found between the faculty members who responded to the initial study and those who responded to the nonrespondent study.

The high component of unreachables coupled with a low direct refusal rate suggests that out of date address information will continue to plague national surveys of mobile populations. We have tried to reduce this source of incomplete data for the second phase follow-up study of the 1969 student cohort by maintaining an address check with the

respondents. We have also designed a follow-up procedure which combines the cost advantage of the mail questionnaire with the informational advantage of the telephone interview. If the first wave response to the mail questionnaire in the second phase is similar to that in the first phase survey, we can expect to receive 30-40 per cent return by mail. The remaining 60 per cent would then be contacted by phone. In this way we should be able to obtain either a completed questionnaire or interview from about 80 per cent of the panel and a report--e.g., refusal, out of country, could not be traced, etc.--for the remainder.

## APPENDIX B

## NONRESPONDENT STUDY

Introduction

The first mailing for the study was made in the late spring of 1969. Several different approaches were tried over the summer in two follow-up attempts to reach the sample of students and graduates and in one to the faculty. The faculty were not recontacted in the August follow-up--a traditional college vacation month. We recognized that the dates when the questionnaires were sent out (i.e., late in the school year and over summer vacation) were unavoidably not very advantageous to securing a high response rate. However, a usable return rate of 61 per cent for students, 58 per cent for faculty, and 57 per cent for graduates was achieved. Another 7 per cent of the students, 8 per cent of the graduates, and 2 per cent of the faculty samples could be accounted for and eliminated from further follow-up attempts because they were not really part of the population samples: e.g., did not enroll, did not graduate, not teaching in the spring of 1969, etc.; or could not be reached because of erroneous address information which could not be corrected; or had written us declining to participate. As will be discussed in greater detail at a later point, this return rate was respectable in comparison to similar studies done in this field. Nonetheless, the possibility of a bias in conclusions drawn from an incomplete sample is a ghost that forever haunts survey research. A 35-40 per cent residual nonresponse rate

represented a significant enough proportion of the total sample to warrant a special study to determine possible sources of bias.

### Methodology

Completing all arrangements for the nonresponse study delayed its execution until the winter of 1970. We approached the three groups of nonrespondents in somewhat different fashions. The students and graduates were contacted by phone; the faculty by mail. The latter group had received fewer follow-up requests, and the questionnaire itself was less amenable to adaptation to a 15-20 minute telephone interview.<sup>1</sup>

A random 20 per cent sample (N=326) of faculty nonrespondents was selected and questionnaires were mailed to them in January 1970. In addition, each of the faculty in the nonrespondent sample was sent a personalized letter which contained an appeal based upon the low response rate in his particular field.

Randomly selected samples of 10 per cent of the student nonrespondents (N=403) and 20 per cent of the graduate nonrespondents (N=178) were chosen in the late fall of 1969. In order to make it practical to administer by telephone, the questionnaire was considerably shortened. Questions were deleted that were not critical or not directly related to possible response bias. The remaining questions were then transposed by Hollander Associates into a telephone interview format. A pretest was administered in January with nonrespondents from two nearby two-year colleges who had participated in the initial study. The pretest

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<sup>1</sup>The telephone interview survey was conducted by Sidney Hollander Associates of Baltimore. The mail survey was carried out by the Bureau staff.

interviews (approximately 25) were extremely successful, and it was decided to proceed with the formal telephone interviews in February 1970. The contract called for the interviewers to make up to six attempts to reach the sample. (However, in many cases over a dozen attempts were made.) Although certain problems such as no telephone listings are inherent in this research approach, this method seemed to be the most appropriate to reach a representative sample of nonrespondents. The work of Hochstim and others<sup>2</sup> demonstrates that results obtained by mail and either telephone or personal interviews are comparable.

The response rate for the faculty nonrespondent study was approximately 23 per cent (N=75), far below our expectation of 40-50 per cent. Because of the low faculty response to the nonresponse study, the 75 respondents were also compared with the remaining 248 nonrespondents on two variables which could be ascertained for both groups without individual contact--sex and major teaching assignment (liberal arts and sciences or technical and vocational). The follow-up study return rates by sex and type of assignment were all between 20 and 24 per cent. We felt that the probable reasons for this low response precluded any further follow-up mailings. First, the "out of sample" and "unreachable" proportion of the faculty sample was very small. Presumably, they had all received our follow-up registered letter if not both of the earlier ones. It seemed clear that those who did not respond to the last personal appeal had decided not to respond at all. Secondly we had received a letter from one school administrator objecting on behalf of a faculty

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<sup>2</sup>See Joseph R. Hochstim "A Critical Comparison of Three Strategies of Collecting Data from Households," Journal of the American Statistical Association, Vol. 62: 1967, pp. 976-989.

member who complained of our continued persistence. Finally, and most importantly, we felt that the time-lapse factor was important for many individuals. From some of their comments it was evident that they were critical of our asking for information for spring 1969, rather than fall 1970. Several persons expressed the belief that their data might be of limited comparative value as the time-lapse increased.

The response rate for the student and graduate nonrespondent study was 49 per cent (N=198) and 56 per cent (N=99) respectively somewhat higher than the expected 40-50 per cent. The interviewers were not able to locate the phone numbers of 37 per cent of the students and 38 per cent of the graduates. The remaining nonresponse was attributable to: being in the military service, unlisted telephone numbers, refusals, and disqualifications of those individuals who did not meet the basic selection criteria of the study. In the student sample, over 7 per cent of the sample failed to meet the inclusion criteria.

#### Comparison of Initial Study and Nonrespondent Study

Following is a comparison of students, graduates, and faculty members who responded to the initial questionnaire with those who responded to the questionnaires sent in the "nonrespondent" study. It should be kept in mind that this is not a comparison of initial respondents with initial nonrespondents. The possibilities of bias within the respondents to the special "nonrespondent" study still exist, making the comparisons between these two sets of respondents rather hazardous.

Basically, two sets of comparisons were carried out. The first set contained some of the variables by which the initial sample of schools was chosen: i.e., SMSA categories and type of school. The second set

contained relevant demographic and academic information which were available in both the initial and nonrespondent-study questionnaires.

### Student Comparisons

A comparison of student respondents and nonrespondents indicated that the samples were quite similar in terms of geographic location and type of school attended (Table B-1).<sup>3</sup>

TABLE B-1

### COMPARISON OF STUDENT RESPONDENTS AND NONRESPONDENTS (In Percentages)

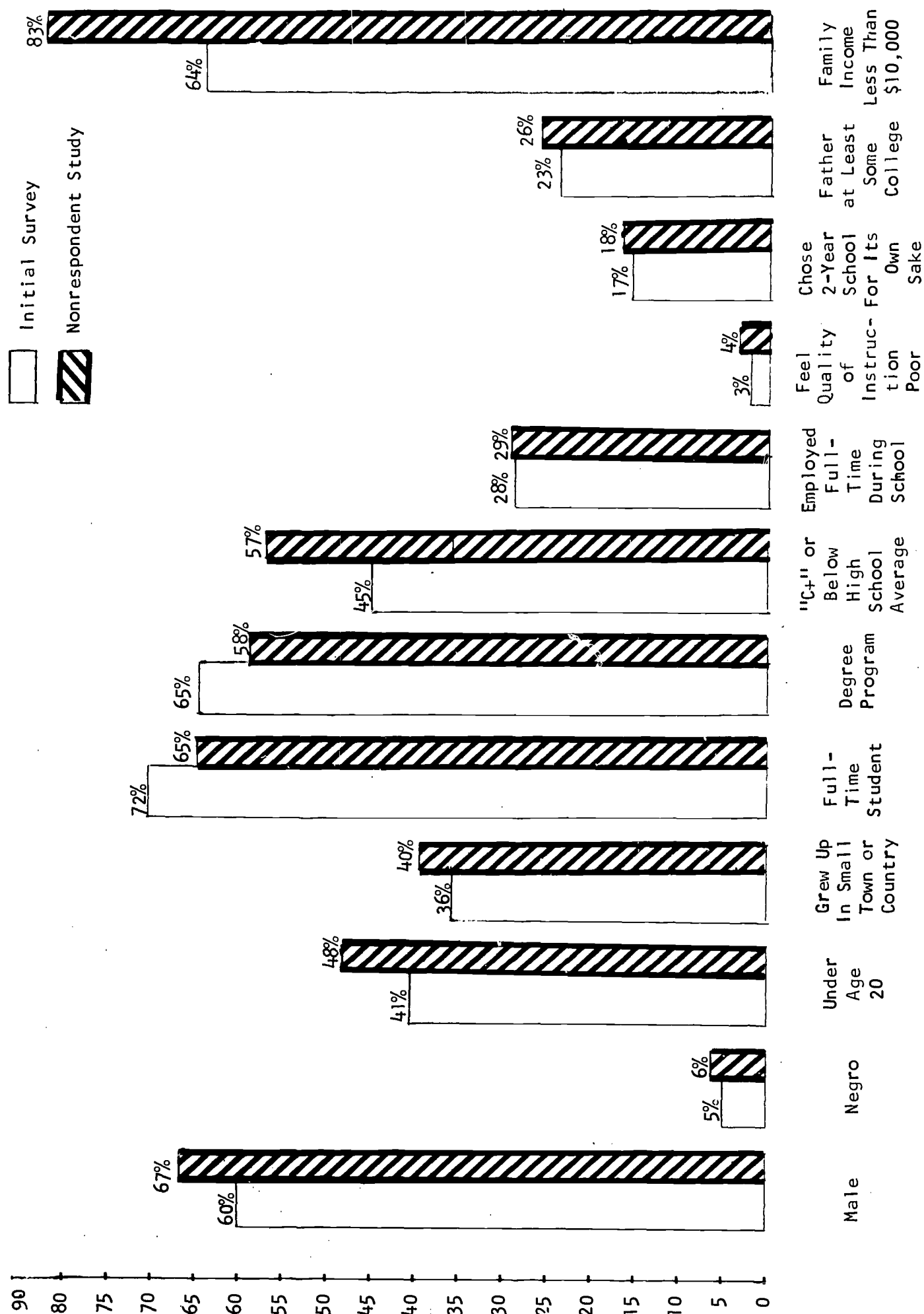
	Initial Respondents	Nonrespondent Study
<u>Number of Respondents</u>	7,673	195
<u>SMSA</u>		
Central city	49.8	50.8
Suburban	26.4	29.2
Outside a SMSA	23.8	20.0
<u>Type of School</u>		
Branch Campus	5.8	7.7
Junior College	76.5	73.3
Technical Institute	10.8	11.8
Voc-Tech Center	6.9	7.2

Figure B-1 presents a comparison of student respondents and nonrespondents by demographic and academic variables for which data were available.

<sup>3</sup>The differences required for significance (two standard errors) in comparisons of the percentages derived from the group of respondents to the initial survey and to the nonrespondent study are based on tables indicating sampling errors of differences between percentages, e.g., Leslie Kish, Survey Sampling (New York: John Wiley, 1965), p. 580.

FIGURE B-1  
COMPARISON OF STUDENT RESPONDENTS AND NONRESPONDENTS  
(BSSR Two-year College Survey)

PER CENT





On the demographic indicators of sex (per cent male), ethnicity (per cent Negro), age (per cent under 20 years of age), and the urban or rural background (per cent who grew up in a small town or open country), the nonrespondent percentages were all within seven per cent of the respondent percentages, i.e., nonsignificant. However, there was a difference in the socioeconomic background of the two groups of students as indicated by family income at the time of graduation from high school. Only two-thirds of the respondents came from families with an annual income less than \$10,000 while 83 per cent of the nonrespondents came from such families.

Regarding the relation and involvement of the student with his school, respondents and nonrespondents were fairly similar with the following exceptions: first, respondents were more likely than nonrespondents to be full-time students; second, students who did better academically in high school were significantly more likely than others to respond to the initial questionnaire. Of the total initial respondent population, only 45 per cent had a high school grade point average of C plus or below while 57 per cent of the nonrespondents reported similar averages, the difference being significant at the .05 level.

The differences in the academic and socioeconomic background of the respondents and nonrespondents must be treated with caution. It is possible that more of the academically-able and affluent students than others who graduated in spring 1969 were away in a four-year college at the time of the nonrespondent study early in 1970. In this case, these students were probably not contacted at their parental home and were consequently underrepresented in the nonrespondent study. The follow-up study of students to be undertaken in the second phase of

this research effort will yield some benchmark data about the whereabouts of these students immediately following graduation, thus permitting us to evaluate further the results of the nonrespondent study.

It is interesting to note that differences in family income and grade point average variables were not associated with the likelihood of a student working: the proportion holding a full-time job was 28 per cent for respondents and 29 per cent for nonrespondents. Similarly, these differences did not seem to be associated with different attitudes toward the school. Only a small proportion of respondents (3%) and a comparably small proportion of nonrespondents (4%) felt that the instruction that the two-year school provided was of poor quality. Also, comparable proportions (17% vs. 18%) of the respondents and nonrespondents chose two-year schools "for their own sake." Finally, despite differences in income levels, the amount of parental education was similar; approximately one-fourth (23% vs. 26%) of respondents and nonrespondents came from families in which the father had at least some college education.

#### Graduates

A comparison of graduate respondents and nonrespondents yielded results which were similar to those found for the student survey. A low response rate was expected from minority groups, older students, those with low incomes and no plans for further involvement in educational pursuits. However, there were no significant differences in the response rates of these groups.

Table B-2 presents a comparison of graduate respondents and nonrespondents according to the two major criteria by which the original sample was chosen. An examination of both distributions across the three

TABLE B-2  
COMPARISON OF GRADUATE RESPONDENTS AND NONRESPONDENTS  
(In Percentages)

	Initial Respondents	Nonrespondent Study
<u>Number of Respondents</u>	1,490 <sup>a</sup>	95
<u>SMSA</u>		
Central city	52.9	52.7
Suburban	23.4	21.1
Outside a SMSA	24.7	26.3
<u>Type of School</u>		
Branch Campus	1.8	2.1
Junior College	81.3	77.9
Technical Institute	10.7	8.4
Voc-Tech Center	6.2	11.6

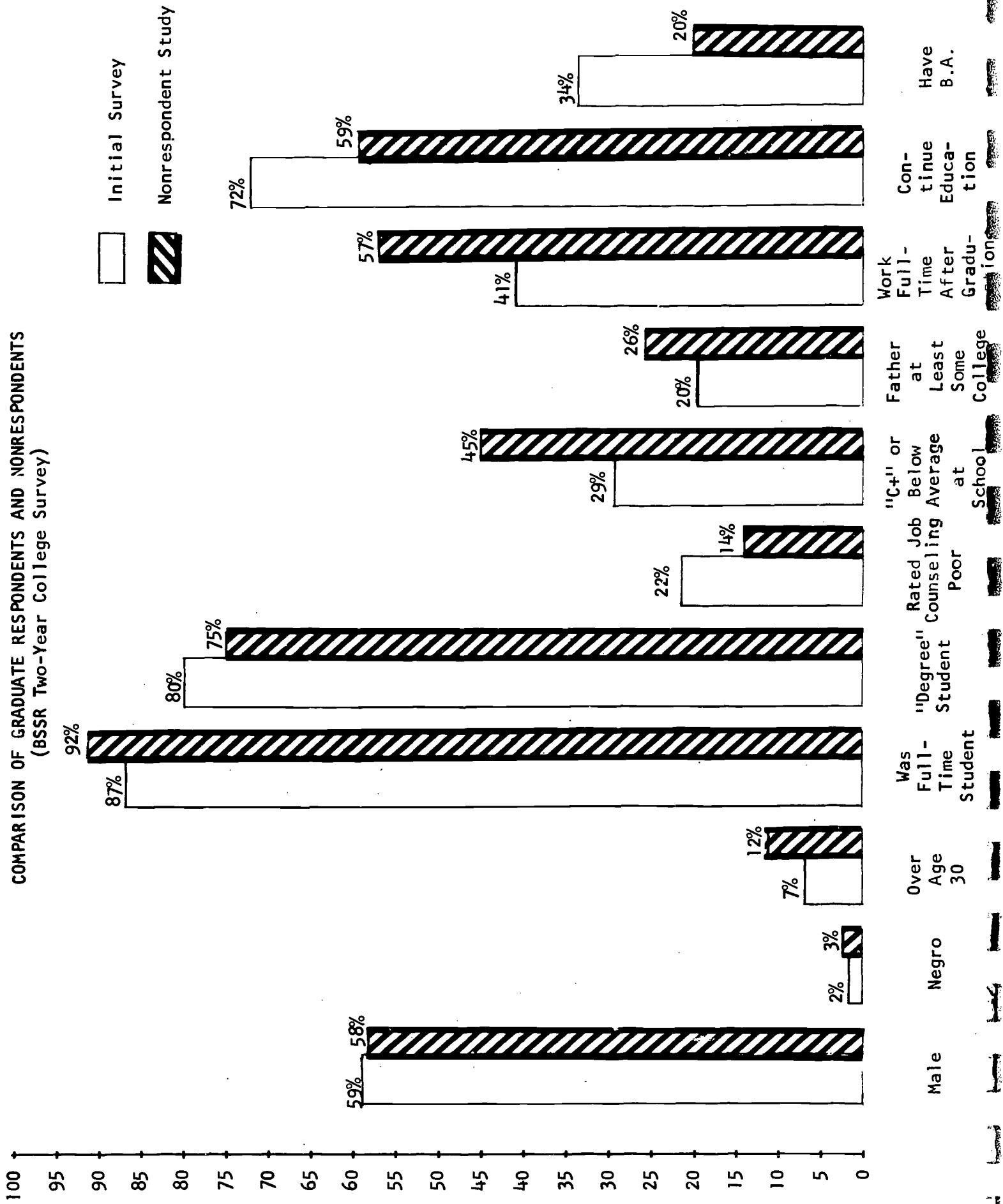
<sup>a</sup>This number differs slightly from that of 1,455 used throughout the report as the analysis of initial response by SMSA and type of school was done before final taping and weighting of the graduate samples.

SMSA categories revealed no variation. In addition, the distribution of respondents and nonrespondents across the four types of schools showed no significant differences.

Figure B-2 presents a comparison of eleven variables derived from questionnaire and interview data. The demographic variables of sex (per cent male), ethnicity (per cent Negro), and age (per cent over 30 years old) were comparable between respondents and nonrespondents.

FIGURE B-2

COMPARISON OF GRADUATE RESPONDENTS AND NONRESPONDENTS  
(BSSR Two-Year College Survey)



Furthermore, indicators of involvement or participation with the school program also showed similarities. The percentages of respondents and nonrespondents who were full-time students or were enrolled in a degree program were within 7 per cent of each other. Attitudes toward the quality of their schools were also comparable. For example, 22 per cent of the respondents and 14 per cent of the nonrespondents thought the job counseling to be of poor quality. This difference borders on significance but is the reverse of the predicted direction, following a standard assumption that the satisfied are more likely to respond.

It appeared that academic performance and family income, which differentiated student respondents and nonrespondents also differentiated graduate respondents and nonrespondents. While 29 per cent of the initial respondents had a two-year college grade point average of "C plus" or below, the percentage was 45 per cent for survey nonrespondents, the difference being significant at the .05 level. Likewise, respondents to the initial study were more likely than others to come from families that had a significantly higher mean income (\$8,413 vs. \$7,225) during the respondents' last year of high school. However, these differences in income levels were not reflected in parallel differences in father's education. In fact slightly more of the nonrespondents than respondents had fathers who had obtained at least some college education.

The grade point and income level differences were associated with different activities after graduation. Nonrespondents were significantly more likely to work full-time immediately after graduation. Furthermore, nonrespondents were somewhat, but not significantly, less likely than respondents to continue their education and to have their

bachelor's degree at the time of the completion of the questionnaire or interview. As discussed earlier, however, these results must be treated with caution, because current college students may be underrepresented among the reached nonrespondents.

It is possible that a high proportion of those more academically and financially qualified graduates might have moved elsewhere to continue their education or to seek better job opportunities. They might have been reached by mail through forwarding procedures, but were, possibly, less likely to be reached at their last local telephone number than graduates with financial or academic limitations who were more likely to be still living and working in the same area in which they went to school.

#### Faculty

Although the low response to the faculty nonrespondent study makes statistical comparisons of the two groups a particularly hazardous undertaking, it should be noted that faculty respondents to the initial study and to the nonrespondent study exhibited very similar characteristics. A special mailing to particularly low-response schools brought forth an additional set of data (N=67) which were used for further comparisons. Response patterns among this group were again quite similar to those obtained in both the initial survey and the nonrespondent study. Table B-3 presents a comparison of faculty respondents and nonrespondents in relation to sampling variables. The distribution of respondents and nonrespondents among central city, suburban, and rural areas was very close. Likewise, there were virtually no differences between respondents and nonrespondents in the distribution of faculty among branch campuses, junior colleges, technical institutes, and vocational-technical centers.

TABLE B-3  
COMPARISON OF FACULTY RESPONDENTS AND NONRESPONDENTS  
(In Percentages)

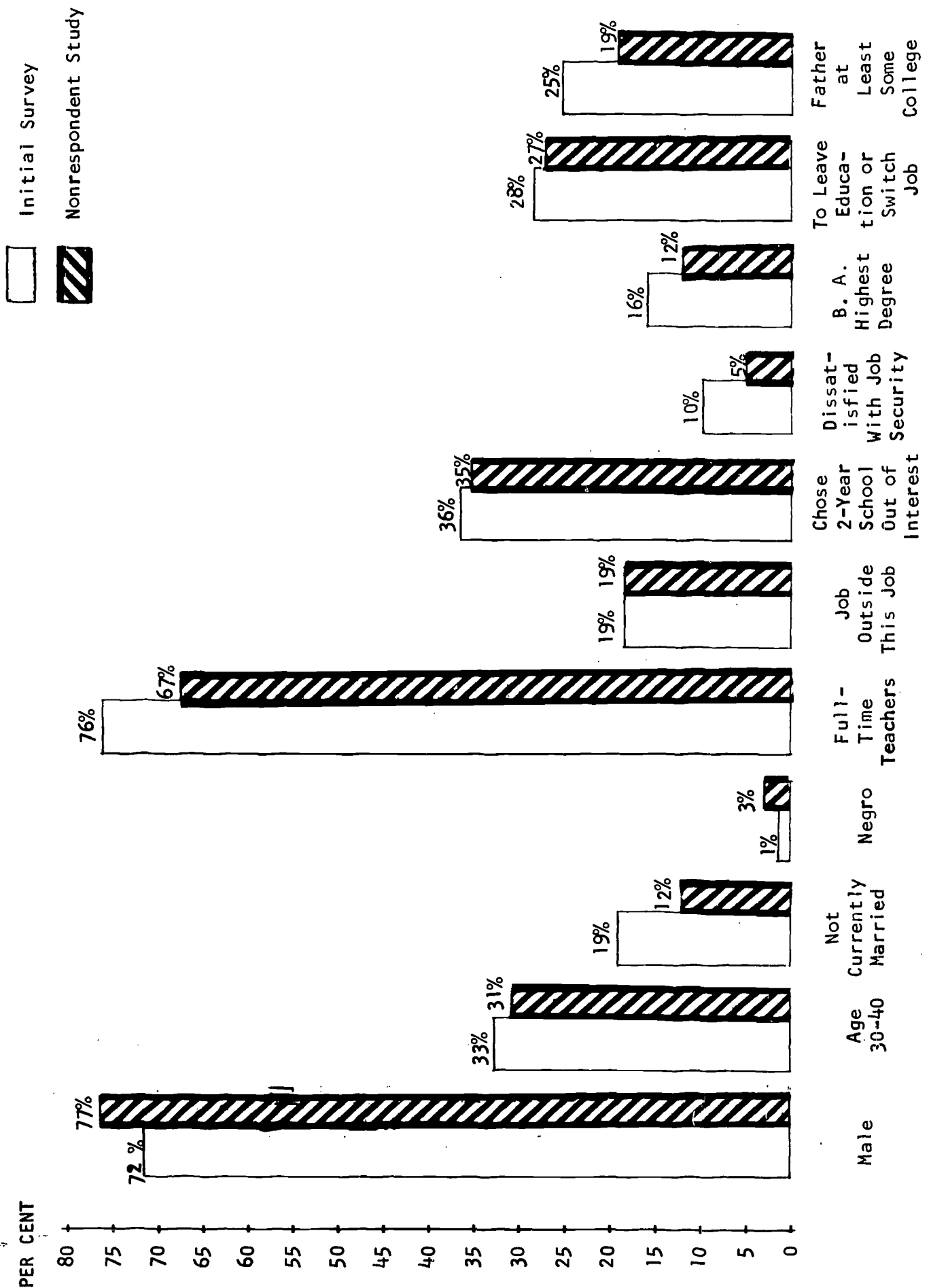
	Initial Respondents	Nonrespondent Study
<u>Number of Respondents</u>	2,391 <sup>a</sup>	75
<u>SMSA</u>		
Central city	48.7	50.7
Suburban	26.2	29.3
Outside a SMSA	25.1	20.0
<u>Type of School</u>		
Branch Campus	4.7	6.7
Junior College	77.0	76.0
Technical Institute and Voc-Tech Center	18.3	17.3

<sup>a</sup>This number differs slightly from the 2,377 used throughout the report as the analysis of initial response by SMSA and type of school was done before final taping and weighting of the faculty sample.

Figure B-3 presents a comparison of faculty respondents and nonrespondents by the eleven substantive variables. Demographic variables such as sex (per cent male), age (per cent 30-40 years old), marital status (per cent not currently married), and ethnicity (per cent Negro) showed no significant differences between respondents and nonrespondents. Variables related to the degree of involvement and commitment by faculty to their schools were also comparably distributed. Nonrespondents seemed somewhat more likely than respondents to be part-time teachers, but the difference was not significant.

FIGURE B-3:

COMPARISON OF FACULTY RESPONDENTS AND NONRESPONDENTS (TOTAL)  
(BSSR Two-year College Survey)





Further, there were no differences in the other indicators of faculty involvement with their institutions. For example, objective indicators such as whether a faculty member had an outside job placed the respondents and nonrespondents within two per cent of each other. Similarly, attitudes toward schools were very comparable. The differences between respondents and nonrespondents who chose working at a two-year school out of interest, who planned to leave education or switch jobs, or who were dissatisfied with their job security were not significant. The educational and social characteristics of the faculty also seemed to be quite similar. For instance, there was no significant difference in the educational attainment of faculty respondents and nonrespondents. Similarly, using father's education as an indicator of socioeconomic origin, no significant difference was found between faculty respondents and nonrespondents whose fathers had at least some college education.

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#### Conclusion

The problem of nonresponse bias in surveys can be subdivided into two components: extent of response and representativeness of respondents. Turning first to the problem of the size of the initial response, we can perhaps evaluate this most fairly in comparison with other educational research with similar populations. Most of these studies have response rates that fall within the 35-60 per cent range and are based on much smaller samples than those used in this study. Perhaps the most comparable are (a) a study of 1958 and 1963 vocational and technical school graduates conducted by the University Research Institute of Connecticut in 1968,

and (b) the Carnegie study of college faculty conducted in 1969. A survey of 2,146 graduates in the first study yielded an overall response rate of 44 per cent; the second study yielded a response rate of 60 per cent, similar to that from our faculty survey which was 58 per cent. The unavoidable and increasing problem of securing high response rates is not unique with this survey.<sup>3</sup>

The results of the follow-up study suggest that the populations of initial respondents and "responding" nonrespondents are quite comparable for students, graduates, and faculty. The student groups exhibited no significant differences across SMSA categories, type of school attended, degree of participation in the school program, demographic variables, and attitudes toward the school. There does seem to be some evidence that nonrespondents were poorer both academically and financially. It must be remembered, however, that more academically (and financially) able students were more likely to be in college at the time of the follow-up study and were, thus, likely to be underrepresented in the follow-up study.

The comparison of graduate respondents and nonrespondents also suggests a high degree of similarity with the same exceptions that were identified for the student population. There was very little difference with respect to variables used to define the initial sample or with respect to demographic variables, attitudes toward the school, and participation in the school's program. There was a tendency for

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<sup>3</sup>A recent compilation carried out by the BSSR summarizing completion rates in its mail studies conducted between 1954 and 1969 shows lower response rates by personnel, students, and graduates, in secondary and postsecondary (two-year) institutions than at the college and graduate level. See Completion Rates in BSSR Mail Survey, Special BSSR report, 1970.

nonrespondents to be poorer students, to come from poorer families, and to be less likely than others to continue their education. Again, however, those more academically and financially able graduates may well be underrepresented in the follow-up study.

Finally, none of the variables chosen showed any major differences between faculty respondents and nonrespondents. In fact, additional data from low-response schools provided another verification of lack of bias introduced by self-selection in the initial response group. On balance, the results of the follow-up study argue that there are few critical differences between respondents and nonrespondents. Our initial concern about underrepresentation of minority groups, older students, and those dissatisfied with their junior college experience were not supported by the data. The only remaining reservation is that the academically and financially poorer students and graduates may be underrepresented in the initial study.

## APPENDIX C

ANALYSIS OF FREE-COMMENTS GIVEN  
IN STUDENT QUESTIONNAIRES

Although there is some evidence in the research literature that asking respondents to give written statements to questions reduces response errors inherent in some forms of closed-end questions,<sup>1</sup> the researchers generally prefer pre-coded questionnaire forms. The major disadvantage of the open-end approach to information collection is the cost factor involved in coding free responses given to such questions; in addition, typical procedures for coding such responses have inhibited the usefulness of open-end questions.<sup>2</sup> In line with these considerations, the majority of the questions included in the survey questionnaires were of the pre-coded type. However, following the standard procedure, the respondents were asked for their free comments at the end of the questionnaire. This section provides a description of some of the free comments offered by student respondents in the survey.

The procedure followed was simply determining the overall rate of free comments given by student respondents in each institution; then examining in detail the responses given by students only in those institutions where the free comment rate was high.

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<sup>1</sup>H. Hyman, et al., Interviewing in Social Research (Chicago: University of Chicago Press, 1954); L.J. Cronback, Essentials of Psychological Testing (2nd Ed.) (New York: Harper & Bros, 1960).

<sup>2</sup>See Seymour Sudman, Reducing the Cost of Surveys (Chicago: Aldine, 1967), p. 154 ff, for a discussion of the use of computers to code free response answers in survey research and the problems involved in such procedures.

Calculating the percentage of questionnaires with free responses it was found that nearly one in four questionnaires (23.3%) in each institution contained some free comments. However, the range varied from 5 to 63 per cent; i.e., in some institutions less than ten per cent of the questionnaires had free comments, while in others over half of the questionnaires had free comments. Seven institutions were then selected from the 19th percentile of free comment distribution by school. The following section describes the free comments given by students in these institutions.

A Branch Campus in Great Lakes Region.--A number of students in this school who offered free comments had already attained a bachelor's degree, mostly in education, and were attending the branch campus for additional credits necessary to obtain or maintain a teaching certificate. Their free comments were mostly explanations of why they felt themselves to be inappropriate subjects for the survey. There were also some negative comments regarding "too personal" aspects of some of the questions, e.g. family income, education of parents. A few negative comments were also offered regarding the institution. For instance, some of the students felt that they were being deprived of a major portion of college life because of the absence of extracurricular activities on their campus. However, the positive comments about the institutions greatly outnumbered the negative ones.

In general, the majority of the free comments pertained to the educational plans of the students to transfer to a four-year college, and to their perceptions of the branch campus as a step in this direction.

Students felt that most aspects of their campus (e.g. instruction, curriculum, atmosphere) were either good or excellent, and that the academic quality was comparable to that of most four-year colleges.

There seemed to be a tendency to exaggerate the transfer aspect of the curriculum. Some of the students did not even regard the school as a two-year institution but preferred to interpret their two years there as the first two years of a baccalaureate program. Thus, there was some resentment of the labeling of the school as a "junior college." This is hardly surprising if we consider the results of the survey which indicate that the majority of the programs in branch campuses are designed for the preparation of students for transfer to four-year colleges. In addition, the majority of faculty members had at least a master's degree, while about half had been directly recruited from graduate schools. It is reasonable to assume that some of the identification of the faculty members with four-year colleges was conveyed to students who were eager to move to the more "prestigious" four-year college themselves.

Junior Colleges.--Both of the junior colleges with high rates of free comments by student respondents were located in the Northeast region. However, the responses of the students in these two institutions were very different.

In the first junior college, the free comments were generally negative. The student body was criticized for being apathetic, but there was also an implication that the administration and faculty members were partially at fault by failing to support the development of the students

as individuals. In addition, the students in vocational programs complained that the administration did not treat them as equals to "academic students."

There was also some general expression of disappointment at the quality of training they had received in high school. High school counselors were criticized for advising (some even used the term forcing) students to take courses which later turned out to be academically "useless." A few of the students who had been rejected by four-year colleges complained that there appeared to be no continuity between high school and college, and that either the students were not prepared adequately in high school or that the admission standards in four-year colleges were set unrealistically high. Many of these same students, however, were still planning to transfer to a four-year college and were hoping that the preparation received in their two-year college would facilitate this transfer.

One positive theme that ran consistently through the free comments offered by the student respondents in this junior college was their appreciation of the "open admission" policy of their school. This positive attitude toward open admissions is hardly surprising in view of the fact that a majority of these comments were given by students who had unsuccessfully tried entry into a four-year college and who were then relying on the remedial services of their two-year institution to give them a second chance.

The student respondents in the second junior college gave overwhelmingly positive responses. Many felt that the two-year colleges were "doing a good job in giving students a chance to develop educationally and individually;" that the inexpensive education provided was good; that

the faculty members were excellent and cared for the students; that the student-teacher rapport was strong; that the smaller size and more communal atmosphere of the two-year college, in addition to its lower tuition, fees, and costs, all contributed to an educational environment more congenial and conducive to learning than that of a four-year college.

There were some negative comments, however, the majority of which focused on the disciplinary function of the administration. In addition, the curriculum was criticized for being too limited. A few of the students said that two-year colleges gave false hopes to students regarding their ability to enter and study in a four-year college while in fact they did not have the ability and training to compete with students in such institutions.

The education provided by high schools was again criticized sharply.

High schools were labeled "inadequate," "mere assembly lines" that "push students through four years of schooling without teaching anything." It was suggested by some respondents that all high school graduates should attend two-year colleges to compensate for inadequate training before entering a four-year college. However, there was also some criticism of the "open-door" policy expressed in fears regarding the quality of students admitted. It was felt that "open-admissions" lowered the quality of students and, hence, the education provided, possibly hindering the articulation between the junior and senior colleges.

It is interesting to note here that some of the major problems inherent in the educational philosophies of two-year colleges were reflected in the free comments given by students. The "cooling out function" of a two-year college was avoided by most students, who chose to emphasize the



academic status of their school as a "feeder college." There was a strong appreciation of the fact that "open-door" admission policy gave them a second chance, and yet, they were also disturbed at the prospect of this policy somewhat lowering their chances of transfer to a four-year college. The reluctance to accept the two-year college as a quality school in its own rights was rather clearly demonstrated by the responses of students in these junior colleges.<sup>3</sup>

Technical Institutes.--Both of the technical institutes with high rates of free comments in student questionnaires were located in the South, and the free responses of the students were very positive and similar.

Each school was praised highly for its "excellent curricula" and "high quality of instruction." Reference was made particularly to job-training programs which "one cannot get in a four-year so-called academic institution."

The majority of the students stated that financially they could not afford a four-year college and that their present institute was providing them with an education and training they "afford and need."

Although the curriculum was thought to be excellent, nevertheless there were some complaints or concerns regarding the importance attached to "so-called academic courses." Many felt that what the school needed was heavier emphasis on job-training programs and not academically oriented courses. The consensus was that they would prefer taking only those courses which were directly related to their major occupational field and not "waste time with academic courses when my chances of going to a college boil down to nothing."

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<sup>3</sup>See Burton R. Clark, The Open Door College. A Case Study (New York: McGraw-Hill, 1960) for a discussion of problems of identity, status, and autonomy faced by two-year colleges, somewhat analogous to those expressed by our student respondents.

The remainder of the comments were either personal (e.g. inquiring after financial aid sources) or related to topics not of immediate concern to the survey (e.g. student dissent).

In general, the students in these technical institutes perceived the function of their school as preparing men and women to fill positions immediately after graduation rather than as a lower-division educational institute which eventually guarantees upper division standing for its students. However, one must keep in mind that a considerable number of students graduating from technical institutes do go on to higher education.

Vocational-Technical Centers.--Of the vocational-technical centers with high rates of free comments in student questionnaires, one was located in the South, the other in the Great Lakes region. The majority of the comments pertained to the respondents' perceptions of the function of their institution. The consensus was that the purpose of vocational-technical centers was to provide job training; i.e., developing skills in students that would either allow them to get jobs or advance them in the jobs they currently hold.

The remarks concerning the faculty and staff were generally positive. The instruction offered was regarded as excellent, and the counseling was found to be helpful. Repeatedly the point was made that the school was offering them an opportunity to get both an education and job training which they would not have otherwise received. It was clear that the majority of the students in vocational-technical centers whose free comments were described above had no identification with, or aspirations for, a four-year college. Some of these respondents were blue-collar workers or housewives,

who were taking courses to develop skills necessary or helpful for their daily activities. There was no indication of future plans involving transfer to a four-year college. In addition there was even a slight resentment of too "schoolish" regimentation-- for example, these respondents did not perceive themselves as "students" and complained about dress codes or other rules of decorum which, they felt, were more suitable to a high-school than a vocational-technical center where out-of-school age people can drop in for an occasional course.

#### Conclusion

The results of this brief analysis of free comments given by students in different types of two-year colleges lend support to one of the major hypotheses of this study in that the students reflect the different educational philosophies of the schools they attend. The branch campus and junior college students are more four-year college oriented than others. Further, analysis seems to indicate that the identity and status problems so clearly described by Clark<sup>4</sup> are more strongly felt by students in junior colleges which have a dual function--offering both transfer and terminal programs--than by students in schools whose function is more clearly defined, e.g., branch campuses (almost completely transfer-oriented) and vocational-technical centers (almost completely job-training oriented). It is clear that the problem of status, identity, and autonomy which perplex administrators and faculty members in two-year colleges is also a very real source of anxiety and frustration for some of the students

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<sup>4</sup>Op. cit.

in these institutions. However tentative, the above results point to additional sources of concern and rethinking for the proponents of multi-purpose institutions of education.

APPENDIX D

QUESTIONNAIRES

Institutional Data Form  
Student Questionnaire  
Faculty Questionnaire  
Graduate Questionnaire

BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

Washington, D. C. 20036

STUDY OF COMMUNITY COLLEGES AND VOCATIONAL TRAINING CENTERS

Institutional Data Form

Please return this questionnaire at your earliest convenience.

Please answer the "check" questions by circling the number or letter to the right of the answer you choose. If some of the categories do not quite fit your situation, please mark the appropriate response and add any necessary comments.

All replies will be held in confidence. No school or individual will be identified in any report of this study.

Name of institution \_\_\_\_\_

Street or post office address \_\_\_\_\_

Address \_\_\_\_\_  
City County State Zip

1. Please circle the number indicating the most appropriate classification for your school or college. Give the name and address of your parent institution if you have one:

Single campus, junior or community college . . . . . 1

One campus of a multicampus junior or community college system . . 2

Two-year branch campus of a four-year college or university. . . . 3

NAME OF PARENT INSTITUTION \_\_\_\_\_

ADDRESS \_\_\_\_\_

Technical institute. . . . . 4

Vocational-technical center. . . . . 5

Two-year institution of a vocational or technical nature  
affiliated with a four-year institution. . . . . 6

NAME OF PARENT INSTITUTION \_\_\_\_\_

ADDRESS \_\_\_\_\_

Other (Specify: \_\_\_\_\_). 0

2. Has your institution changed its organizational classification since its founding?

Yes. . . . . 1

No . . . . . 2

- 2a. IF YES, was it formerly a:

Branch campus of a four-year institution. . . . . 1

NAME OF PARENT INSTITUTION \_\_\_\_\_

ADDRESS \_\_\_\_\_

Extension center of a four-year institution . . . . . 2

Technical institute . . . . . 3

Vocational-technical center . . . . . 4

Specialized vocational school (e.g., agricultural,  
nursing school) . . . . . 5

Other (Specify: \_\_\_\_\_) . 0

3. What type of credit hour system does your institution use?

Semester system. . . . 1

System based on clock hours . . . . 4

Quarter system . . . . 2

Other (Specify: \_\_\_\_\_)

Trimester system . . . 3

\_\_\_\_\_ . 0

4. How does your institution define a "full-time" and a "part-time" student? (Use either clock hours or credit hours, whichever is more appropriate.)

Full-time student: \_\_\_\_\_

Part-time student: \_\_\_\_\_

5. How many full-time and part-time students are enrolled in your institution this year (1968-69)?

Full-time students: \_\_\_\_\_ Part-time students: \_\_\_\_\_

6. How many full-time and part-time students could your institution accommodate at full capacity?

Full-time students: \_\_\_\_\_ Part-time students: \_\_\_\_\_

7. Approximately what per cent of your students this semester or quarter are primarily enrolled in each of the following programs? Please count each student only once. If there are no students in a given category, leave the space blank.

	Per Cent of Students	
	Full-Time	Part-Time
Two-year transfer programs . . . . .	_____	_____
Two-year occupational programs . . . . .	_____	_____
Certificate programs (less than two years) . .	_____	_____
Basic, remedial programs (no degree credit) . .	_____	_____
General education (no degree credit) . . . . .	_____	_____
Other (Specify: _____) .	_____	_____

8. Can you furnish us with a report on enrollment figures by curriculum or program (e.g., automotive technology, retailing, preengineering)?

Yes . . . . . 1

No . . . . . 2

Comment:

8a. IF YES: Please return a copy of that report with this questionnaire.

9. Please give the number of applications for enrollment your institution received for all programs in the Fall of 1968.

NUMBER OF APPLICATIONS FOR FALL OF 1968 \_\_\_\_\_

10. What proportion of the students who applied to your school for Fall of 1968 were:

Accepted and enrolled in this school . . . . . 1 \_\_\_\_\_%

Accepted but enrolled in some other institution. . . . . 2 \_\_\_\_\_%

Accepted but could not afford to come. . . . . 3 \_\_\_\_\_%

Accepted but for an unknown reason did not come. . . . . 4 \_\_\_\_\_%

Not accepted because did not meet entrance requirements. . . 5 \_\_\_\_\_%

Not accepted because school capacity filled. . . . . 6 \_\_\_\_\_%

Other (Specify: \_\_\_\_\_) . . 0 \_\_\_\_\_%

100%



11. How many new students actually enrolled in the Fall of 1968?

NUMBER OF NEW STUDENTS \_\_\_\_\_

### TUITION AND COSTS

12. What are the tuition charges or fees at your institution? Please give the charge per unit (per semester, per quarter, per credit hour, per course) for full-time and part-time students. If there is no tuition charge, circle the "x" on the appropriate line.

Tuition Charge for Student				
Full-Time Per:		Part-Time Per:		None
Semester	Quarter	Credit Hr.	Course	
In-district student. . . . .	.\$_____	\$_____	\$_____	\$_____ x
In-state student . . . . .	.\$_____	\$_____	\$_____	\$_____ x
Out-of-state student . . . . .	.\$_____	\$_____	\$_____	\$_____ x

13. Indicate which of the following fees you have at your school and the amount of each.

	No Fee for This Item	Optional	Required	Amount
Application fee. . . . .	1	2	3	\$_____
Registration fee:				
day. . . . .	1	2	3	\$_____
evening. . . . .	1	2	3	\$_____
Laboratory fee:				
average per academic course. .	1	2	3	\$_____
average per vocational course. .	1	2	3	\$_____
Physical education fee . . . . .	1	2	3	\$_____
Health fee or insurance. . . . .	1	2	3	\$_____
Activity fee:				
full-time student. . . . .	1	2	3	\$_____
part-time student. . . . .	1	2	3	\$_____
Graduation fee . . . . .	1	2	3	\$_____
Other (Specify: _____). . . . .	1	2	3	\$_____

14. Does your institution have dormitories or other provisions for housing students on your campus?

Yes . . . . . 1

No . . . . . 2

- 14a. IF YES: What proportion of your students are residential students?

Residential students \_\_\_\_\_%

- 14b. IF YES: What are the charges for room and board? Please give the charges per semester, quarter, or whatever other time period you use. (Exclude married student housing.)

Room . . . . \$ \_\_\_\_\_ per \_\_\_\_\_

Board. . . . \$ \_\_\_\_\_ per \_\_\_\_\_

15. On the average, what does it cost a full-time student at your institution for his education including tuition, fees, books and living expenses for an academic year?

Tuition, Fees  
Books, etc.

Living Expenses  
(Residential Students Only)

Transfer program . . . . . \$ \_\_\_\_\_ per yr. \$ \_\_\_\_\_ per yr.

Occupational program . . . \$ \_\_\_\_\_ per yr. \$ \_\_\_\_\_ per yr.

16. About how many full-time students in your school are using the following financial aids to pay for their education or training? CIRCLE THE NUMBER INDICATING THE CLOSEST PER CENT CATEGORY FOR EACH ITEM.

Full-tuition scholarships:

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

Part-tuition scholarships:

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

GI Bill:

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

Federal loan programs (NDEA, Higher Education Act, Public Health Service Act):

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

State loan programs:

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

Work-study programs (under Vocational Education Act or Higher Education Act):

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

Industry sponsored training programs:

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

Other financial aid programs (Specify: \_\_\_\_\_).

0% 2% 5% 10% 15% 20% 25% 30% 40% 50% 75% 100%

17. What are the average costs per (full-time) student to your institution for each type of program for an academic year?

Transfer program . . . \$ \_\_\_\_\_ per student per year

Occupational program . \$ \_\_\_\_\_ per student per year

18. Do the financial records of your institution enable you to provide cost data by specific program or course? We are not asking for this information now. Rather we wish to know whether or not programmatic rather than line item expenditures could be obtained, assuming that appropriate reimbursement for the time necessary to provide such information were provided.

Yes . . . . . 1

No . . . . . 2

#### STUDENT BODY CHARACTERISTICS

19. From what geographical area do you draw the majority of your student population? Please delineate the area served (e.g., Smith County, Central City, northern half of the state, etc.).

\_\_\_\_\_

20. Approximately how many high school graduates are within this same geographical service area?

NUMBER OF HIGH SCHOOL GRADUATES \_\_\_\_\_

- Don't have that information . . . . . x

21. Approximately how many of the students in your school are from each of the following ethnic groups?

	<u>Number</u>
American Indian . . . . .	_____
Cuban descent . . . . .	_____
Mexican descent . . . . .	_____
Negro . . . . .	_____
Oriental . . . . .	_____
Puerto Rican descent . . . . .	_____

22. Approximately what per cent of your full-time and part-time students are in each of the following age categories?

	Per Cent of Students	
	Full-Time	Part-Time
Below 20 . . . . .	_____	_____
20 - 24. . . . .	_____	_____
25 - 29. . . . .	_____	_____
30 - 39. . . . .	_____	_____
40 - 49. . . . .	_____	_____
50 and above . . . . .	_____	_____
	100%	100%

23. Approximately what per cent of your full-time and part-time students come from a background that is:

	Per Cent of Students	
	Full-Time	Part-Time
Rural. . . . .	_____	_____
Suburban . . . . .	_____	_____
Urban. . . . .	_____	_____
	100%	100%

24. Approximately what per cent of the full-time students who entered your school this year (1968-69) do you expect will eventually do each of the following?

Transfer to another school before program completion . . .	_____ %
Drop out of school permanently before program completion .	_____ %
Drop out of school temporarily but eventually return to complete the program. . . . .	_____ %
Finish program and go on for further vocational or technical training . . . . .	_____ %
Finish program and go on for further college or university training. . . . .	_____ %
Finish program and enter the job market without further formal training. . . . .	_____ %
Other (Specify: _____)	_____ %

# FACULTY CHARACTERISTICS

25. As of your latest regular report date to the state, how many persons were on your professional teaching, guidance, and administrative staff? Please count each person only once. Those who have more than one function should be listed under their major responsibility.

	<u>Full-Time</u>	<u>Part-Time</u>
Teaching faculty. . . . .	_____	_____
Counselors, guidance personnel. . . .	_____	_____
Administrative personnel. . . . .	_____	_____
Total. . . . .	_____	_____

26. How many of the professional staff enumerated in Q.25 are new to your institution this year, either because of expansion or replacement of teachers who left?

	<u>Full-Time</u>	<u>Part-Time</u>
NUMBER OF REPLACEMENT STAFF . . . . .	_____	_____
NUMBER OF EXPANSION STAFF . . . . .	_____	_____
TOTAL NEW STAFF. . . . .	_____	_____

27. Approximately how many of the faculty who left your institution at the close of the 1967-68 academic year did each of the following:

	<u>Number</u>
Accepted a position at another two-year institution (Specify type: _____) .	_____
Accepted a position at a four-year college or university .	_____
Left the educational profession for other employment . . .	_____
Left the educational profession because of marriage or pregnancy . . . . .	_____
Returned to school as full-time student. . . . .	_____
Retired. . . . .	_____
Other (Specify: _____) .	_____

28. Approximately how many of the new faculty in your institution this year (1968-69) came from each of the following sources?

	Number
Directly from an undergraduate degree . . . . .	_____
Directly from a graduate degree . . . . .	_____
Directly from employment outside education. . . . .	_____
Directly from a teaching position in a two-year postsecondary institution . . . . .	_____
Directly from a teaching position in a four-year college or university . . . . .	_____
Directly from a teaching position in a high school. . . . .	_____
Directly after retirement from a military career. . . . .	_____
Other (Specify: _____)	_____

29. Approximately what proportion of your professional staff holds each of the following degrees?

	TEACHING FACULTY		GUIDANCE PERSONNEL		ADMINISTRATIVE PERSONNEL	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
High school diploma. _____	_____	_____	_____	_____	_____	_____
A.A., A.A.S., A.S. . . . .	_____	_____	_____	_____	_____	_____
B.A., B.S. . . . .	_____	_____	_____	_____	_____	_____
M.A., M.S. . . . .	_____	_____	_____	_____	_____	_____
M.Ed. . . . .	_____	_____	_____	_____	_____	_____
Ph.D. . . . .	_____	_____	_____	_____	_____	_____
Ed.D. . . . .	_____	_____	_____	_____	_____	_____
Other (Specify: _____)	_____	_____	_____	_____	_____	_____
	100%	100%	100%	100%	100%	100%

# ARTICULATION WITH OTHER INSTITUTIONS

30. Approximately how many colleges and vocational training centers, both public and private, are located within the geographical area you serve?

	Number of Institutions	Don't Know
Public junior, community colleges. . . . .	_____	x
Public technical institutes, voc-tech centers. . . . .	_____	x
Public colleges and universities . . . . .	_____	x
Private junior colleges. . . . .	_____	x
Proprietary schools (business, electronics, data processing, etc.) . . . . .	_____	x
Private colleges and universities. . . . .	_____	x
Other (Specify kind: _____) . . . . .	_____	x
Total. . . . .	_____	

31. How are your curriculum offerings and policies affected by these other institutions in your service area? PLEASE ANSWER ALL THAT APPLY.

Our transfer curriculum is geared to the lower division requirements of the state university . . . . .	1
Other postsecondary institutions have more restrictive admissions policies, in effect encouraging certain students to attend our institution . . . . .	2
We do not provide curricula already well-established at other postsecondary institutions. . . . .	3
Four-year institutions in our area actively encourage transfer students from our institution . . . . .	4
Unnecessary duplication of programs in several postsecondary institutions in our area creates low-enrollment problems in some of our curricula . . . . .	5
The junior colleges and vocational-technical schools are competing for the same areas of vocational instruction. . . . .	6
Other institutions in our service area have no effect on curriculum offerings and policies in this institution. . . . .	7
Other (Specify: _____)	0

32. What role does your institution now have in the total system of higher education in your state?

33. Can you furnish us with a report, discussion paper, etc., outlining your development plans for the next few years?

Yes. . . . . 1

No . . . . . 2

Comment:

33a. IF YES: Please return a copy of the report with this questionnaire.

\* \* \* \* \*

Thank you for completing the questionnaire. Please use the back of this sheet for any additional comments you wish to make.

Please include the following materials in the attached envelope with this data form:

1. A school catalogue or course list.
2. A copy of your current budget.
3. A copy of your most recent annual report to your governing board (if available).
4. A listing of enrollment by curriculum or program (if available).
5. A report on future development plans (if available).



**STUDY OF COMMUNITY COLLEGES  
AND  
VOCATIONAL-TECHNICAL CENTERS**

**STUDENT QUESTIONNAIRE**

**BUREAU OF SOCIAL SCIENCE RESEARCH  
WASHINGTON, D.C. 20036**



BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

1200 SEVENTEENTH STREET, N.W., WASHINGTON, D. C. 20036  
TELEPHONE (202) 223-4300

ELEANOR P. GODFREY  
RESEARCH ASSOCIATE

Dear Student:

The Bureau of Social Science Research is beginning a study of two-year colleges and technical centers. The study, sponsored by the U. S. Office of Education, seeks to establish a base line of information from which to measure future growth and development.

As a student in one of these schools, the information you are able to give will help us make our educational system more effective. We are especially interested in your educational background, current school experiences, and plans for the future.

Your name and address were selected at random from a list provided by your school. All replies will be held in confidence and no individual will be identified in any report of the study.

Your participation will be greatly appreciated.

Sincerely,

*Eleanor P. Godfrey*  
Eleanor P. Godfrey

EPG/as

TRUSTEES: W. PHILLIPS DAVISON  
ALFRED WINSLOW JONES

ROBERT T. BOWER  
PAUL F. LAZARSFELD

ELLSWORTH BUNKER  
HERBERT J. MILLER, JR.

G. FRANKLIN EDWARDS  
M. BREWSTER SMITH

GEORGE GALLUP  
PAUL A. SMITH

BUREAU OF SOCIAL SCIENCE RESEARCH, INC.  
Washington, D. C. 20036

STUDY OF COMMUNITY COLLEGES AND VOCATIONAL-TECHNICAL EDUCATION CENTERS

STUDENT QUESTIONNAIRE

PLEASE FILL OUT THIS QUESTIONNAIRE AT YOUR EARLIEST CONVENIENCE.  
TO RETURN TO US: FOLLOW INSTRUCTIONS UNDER FLAP ON BACK COVER.  
ANSWER EACH QUESTION BY CIRCLING THE NUMBER TO THE RIGHT OF THE  
ANSWER YOU CHOOSE, ALL REPLIES WILL BE HELD IN CONFIDENCE.

■ ABOUT YOUR CURRENT EDUCATION ■

1. What is the name of the college or technical school where you are currently enrolled?

Name of School	City	State
----------------	------	-------

2. Are you currently classified as a: PLEASE CIRCLE THE APPROPRIATE NUMBER.

First year student . . . . .	0
Second year student . . . . .	1
Special student (Please explain): _____	2
Other (Please explain): _____	3

3. Are you currently enrolled as a full-time or part-time student?

Full-time . . . . .	0	Part-time (less than $\frac{3}{4}$ of full-time load) . . . . .	1
---------------------	---	---	---

4. Are you attending day or evening classes?

Day only . . . . .	0	Evening only . . . . .	1	Both day and evening . . . . .	2
--------------------	---	------------------------	---	--------------------------------	---

5. When did you first enroll in the institution you are now attending?

Month	Year
-------	------

6. Why did you choose the college or technical school you are now attending? CHOOSE THE MOST IMPORTANT REASON - CIRCLE ONE ANSWER ONLY.

This school is conveniently located . . . . .	0
I was interested in a specific program offered at this school. . . . .	1
Easier entrance requirements at this school . . . . .	2
Could not afford four-year college . . . . .	3
Parents wanted me close by. . . . .	4
Easier to get degree or certificate here . . . . .	5
Other (Please specify): _____	6

7. How many semester or quarter hours of credit are you taking this term?

Total semester-credit hours \_\_\_\_\_

or

Total quarter-credit hours \_\_\_\_\_

8. What is your major course or field of study?

Have not yet decided on a major . . . . .	.00
Agriculture . . . . .	.01
Business and commerce (accounting, management, etc.) . . . . .	.02
Distributive education (retailing, salesmanship, etc.) . . . . .	.03
Education (elementary, secondary, special) . . . . .	.04
Engineering . . . . .	.05
Health occupations (nursing, dental assisting). . . . .	.06
Home economics . . . . .	.07
Humanities and arts (English, journalism, fine arts, music, foreign language, philosophy, religion) . . . . .	.08
Natural and physical science (biology, chemistry, earth science, mathematics, physics, other physical science) . . . . .	.09
Office occupations (secretarial, bookkeeping, etc.) . . . . .	.10
Physical education. . . . .	.11
Social science (economics, history, psychology, political science, sociology and anthropology) . . . . .	.12
Technical occupations (data processing, construction technology, etc.) . . . . .	.13
Trade and industrial occupations (auto mechanics, carpentry, etc.) . . . . .	.14
Other (Please specify): _____	15

9. What type of program or curriculum are you enrolled in?

Degree program . . . . .	0
Certificate program. . . . .	1
Course work only (no degree or certificate work) . . . . .	2
Other (Please specify): _____	3

10. Considering all the obligations you may have, including personal, financial, military service, etc., how soon do you expect to complete the degree or program in which you are enrolled?

I expect to complete it about \_\_\_\_\_  
Month Year

11. While attending school, where do you live?

In my own home or apartment . . . . . 0  
With my parents or relatives (not spouse) . . . . . 1  
In dormitory or other school housing . . . . . 2  
Other (Please specify): \_\_\_\_\_ 3

12. How do you usually get to and from school?

Walk . . . . . 0  
Public transportation . . . . . 1  
Drive own or family car . . . . . 2  
Ride with someone who drives . . . . . 3  
Other (Please specify): \_\_\_\_\_ 4

13. How much time does it *usually* take you to commute (one way only) to your school? IF YOU DO NOT LEAVE FOR SCHOOL FROM THE SAME PLACE EVERYDAY, ESTIMATE THE AVERAGE LENGTH OF TIME YOU TRAVEL.

Less than 15 minutes . . . . . 0	45-59 minutes . . . . . 3
15-29 minutes . . . . . 1	One hour . . . . . 4
30-44 minutes . . . . . 2	More than an hour . . . . . 5

14. Do you find the time involved in commuting to school:

A serious inconvenience . . . . . 0	A minor inconvenience . . . . . 2
Somewhat of an inconvenience . . . . . 1	No inconvenience at all . . . . . 3

15. Where is your school located, relative to your residence during your last year in high school?

Same town or city as my high school . . . . . 0  
Different town or city, but *within daily commuting distance* . . . . . 1  
Different town or city and *not within commuting distance* . . . . . 2  
Different state, but *within daily commuting distance* . . . . . 3  
Different state and *not within commuting distance* . . . . . 4  
Other (Please specify): \_\_\_\_\_ 5

16. What is your main reason for going to school? *CIRCLE ONE.*

- Wanted to have more than a high school education . . . . . 0
- Wanted to have a college degree . . . . . 1
- Needed the education and/or training for a beginning job in my chosen field . . . . . 2
- Needed the education and/or training in order to get ahead in my chosen field . . . . . 3
- Interested in a specific program of study or training . . . . . 4
- Other (Please specify): \_\_\_\_\_ 5

17. Please give your frank opinion about the following aspects of your school environment.

**CIRCLE ONE ANSWER FOR EACH ITEM. CIRCLE THE NUMBERS IN ONE OF THE LAST 2 COLUMNS IF YOU HAVE HAD NO EXPERIENCE WITH THE SUBJECT OR IF THE ITEM DOES NOT EXIST AT YOUR SCHOOL.**

	<u>Excellent</u>	<u>Satisfactory</u>	<u>Poor</u>	<u>I Have Had No Experience with That</u>	<u>Does Not Exist at My School</u>
Quality of instruction . . . . .	4	3	2	1	0
Academic counseling . . . . .	4	3	2	1	0
Job or career counseling . . . . .	4	3	2	1	0
Student participation in school's administrative and academic decisions . . . . .	4	3	2	1	0
Student activities (social, athletics, etc.). . . . .	4	3	2	1	0
Congeniality of the student body . . . . .	4	3	2	1	0
Job placement service . . . . .	4	3	2	1	0
Intellectual atmosphere. . . . .	4	3	2	1	0
School reputation . . . . .	4	3	2	1	0
Availability of teachers outside classroom hours . . . . .	4	3	2	1	0
Student-teacher relations . . . . .	4	3	2	1	0

18. What problems do you have which tend to interfere with your education at the school you are now attending?

CIRCLE ONE ANSWER FOR EACH ITEM.

	<u>Major Problem</u>	<u>Minor Problem</u>	<u>No Problem</u>
1. Courses are too hard . . . . .	2	1	0
2. Inadequate high school preparation . . . . .	2	1	0
3. My job takes too much time . . . . .	2	1	0
4. Find it hard to adjust to school routine . . . . .	2	1	0
5. School doesn't offer the courses I want to take. . . . .	2	1	0
6. Worry over financial obligations (repayment of loan, support of dependents, etc.). . . . .	2	1	0
7. My own ill health . . . . .	2	1	0
8. Have poor study habits . . . . .	2	1	0
9. Transportation to school is difficult . . . . .	2	1	0
10. Many courses are a waste of time . . . . .	2	1	0
11. Family obligations take too much time . . . . .	2	1	0
12. Don't feel part of the school community . . . . .	2	1	0
13. Other (Please specify): _____	2	1	0

Of all the problems listed above, choose the one which you consider the most important problem interfering with your education at the school you are now attending.

■ ABOUT YOUR WORK AND FINANCIAL STATUS ■

19. Are you currently employed while attending school?

Yes, full-time. (35 hours or more) . . . . .	0
Yes, part-time. (1 to 34 hours) . . . . .	1
No . . . . .	2

IF YOU ARE CURRENTLY EMPLOYED FULL-TIME OR PART-TIME, PLEASE COMPLETE QUESTIONS 20 THROUGH 22 OTHERWISE PROCEED TO QUESTION 23.

20. What kind of work do you do? (Describe your job in a few words; e.g., I am a cataloger in the school library; I assist the manager in a super market; I am a typist.)

21. Approximately how many hours do you work in an average week?

\_\_\_\_\_ hours

22. What are your average hourly earnings (before deductions)?

\$ \_\_\_\_\_ dollars per hour

23. What occupation or type of work do you plan to make your life-time work? (If undecided, write "undecided".)

\_\_\_\_\_

24. Try to make an estimate of your *total living expenses* during the *school* year (September-June). If you are married or living at home with your parents, estimate the proportion of your family's living costs which goes toward *your* support.

Rent, food, clothing, medical expenses . . . . . \$ \_\_\_\_\_  
Tuition, fees, books, transportation to school . . . . . \$ \_\_\_\_\_  
Recreation, entertainment, miscellaneous. . . . . \$ \_\_\_\_\_  
Other (Please specify): \_\_\_\_\_ \$ \_\_\_\_\_  
Total \$ \_\_\_\_\_

25. For your total expenses during the school year as shown in the "total" answer to Q. 24, please show the proportion contributed from the various sources listed below.

ESTIMATE THE PERCENTAGE CONTRIBUTED TO YOUR SUPPORT BY EACH OF THE FOLLOWING SOURCES AND WRITE IT IN THE SPACE PROVIDED. INDICATE BY 0 PER CENT WHEN THE PERSON OR MEANS DID NOT CONTRIBUTE AT ALL. THE PER CENTS SHOULD TOTAL 100.

	<u>Per cent</u>
Self through current job. . . . .	_____ %
Self, through savings . . . . .	_____ %
Parents . . . . .	_____ %
Spouse . . . . .	_____ %
Other relatives . . . . .	_____ %
Loan. . . . .	_____ %
Scholarship . . . . .	_____ %
GI Bill . . . . .	_____ %
Other (Please specify): _____	_____ %
Total	100 %



26. Have you ever applied for a loan or grant from an institution to finance your education?

Yes . . . . . 0 No. . . . . 1

IF YOU ANSWERED "YES" TO THE LAST QUESTION, PLEASE COMPLETE QUESTIONS 27 AND 28; OTHERWISE, PROCEED TO QUESTION 29.

27. Have you ever obtained a loan or grant from an institution?

Yes; total amount of all loans, \$ \_\_\_\_\_ . . . . . 1

No . . . . . 0

28. What kinds of loans or grants did you obtain?

CIRCLE ALL THAT APPLY.

Loan from commercial bank . . . . . 1

Loan from school or college . . . . . 1

Loan from Federal government . . . . . 1

Loan from State or local governments . . . . . 1

Scholarship from school or college . . . . . 1

Scholarship from Federal government . . . . . 1

Other scholarships (Please specify): \_\_\_\_\_ 1

Other loans or grants (Please specify): \_\_\_\_\_ 1

29. If you have borrowed money from your parents, relatives, banks, etc., to finance your education, please estimate the amount of loans which will be outstanding by the end of this academic year (June 1969). *Only include those loans which you plan to repay.*

Total amount of repayable educational loans as of the end of academic year 1968-69 \$ \_\_\_\_\_

30. Do you have any concern about your ability to finance your college education?

None (I am confident that I will have sufficient funds.) . . . . . 0

Some concern (but I will probably have enough funds.) . . . . . 1

Major concern (I am not sure I will be able to complete college.) . . . . . 2

■ ABOUT YOU AND YOUR FAMILY ■

31. What is your current marital status?

Never married . . . . . 0      Married, children . . . . . 2  
 Married, no children . . . . . 1      Other (separated, widowed, divorced) . . . . . 3

32. How much education did your father, mother and husband or wife complete?

ANSWER FOR THE HIGHEST LEVEL OF EDUCATION COMPLETED BY EACH.

CIRCLE ONE NUMBER FOR EACH:

<u>Education</u>	<u>Father</u>	<u>Mother</u>	<u>Spouse</u>
Grade school or less . . . . .	0	0	0
Some high school . . . . .	1	1	1
High school graduate . . . . .	2	2	2
Post high school technical or business school . . . . .	3	3	3
Some college . . . . .	4	4	4
College graduate . . . . .	5	5	5
Graduate or professional degree . . . . .	6	6	6
Don't know . . . . .	7	7	7
Not married . . . . .	—	—	9

33. What is (was) the *main occupation* of your father and mother? If you were raised by a stepfather, answer for him.  
 If your husband or wife is employed, please check her (his) occupation.

CIRCLE ONE NUMBER FOR EACH:

<u>Occupation</u>	<u>Father</u>	<u>Mother</u>	<u>Spouse</u>
Clerical or sales (bookkeeper, typist, real estate salesman, etc.) . . . . .	00	00	00
Skilled craftsman or foreman (baker, electrician, mechanic, factory foreman, etc.) . . . . .	01	01	01
Professional (pharmacist, engineer, artist, etc.) . . . . .	02	02	03
Teacher or other educator (school counselor, principal, etc.) . . . . .	03	03	03
Laborer (longshoreman, gas station attendant, etc.) . . . . .	04	04	04
Service worker (policeman, waiter, barber, etc.) . . . . .	05	05	05
Technician (draftsman, nurse, laboratory technician, etc.) . . . . .	06	06	06
Semiskilled worker (truck driver, factory machine operator, meat cutter, etc.) . . . . .	07	07	07
Proprietor, manager, official, executive (farm manager, contractor, company officer, etc.) . . . . .	08	08	08
Homemaker . . . . .	11	11	11
Student . . . . .	12	12	12
Other (Please specify): _____	09	09	09
Don't know . . . . .	10	10	10

If your mother was the *main or only* wage-earner, please check here ☐

34. What is your best estimate of your family's total income while you were in your *last year of high school*? Consider annual income from all sources *before taxes*.

Less than \$3,000 . . . . .	0	\$10,000-\$14,999 . . . . .	4
\$3,000-\$4,999. . . . .	1	\$15,000-\$19,999 . . . . .	5
\$5,000-\$6,999. . . . .	2	\$20,000-\$24,999 . . . . .	6
\$7,000-\$9,999. . . . .	3	\$25,000 and over . . . . .	7

35. Your age:

15 and younger . . . . .	0	25-29 . . . . .	4
16-17 . . . . .	1	30-34 . . . . .	5
18-19 . . . . .	2	35-39 . . . . .	6
20-24 . . . . .	3	40 and over. . . . .	7

36. Your Sex: Male . . . . . 0 Female . . . . . 1

37. Are you a member of any of these ethnic groups?

Yes, American Indian . . . . .	0	Yes, Mexican . . . . .	4
Yes, Negro . . . . .	1	Yes, Puerto Rican . . . . .	5
Yes, Oriental . . . . .	2	No. . . . .	6
Yes, Cuban . . . . .	3		

IF YOU ARE MARRIED AND YOUR SPOUSE IS EMPLOYED, PLEASE COMPLETE QUESTIONS 38 AND 39, OTHERWISE PROCEED TO QUESTION 40.

38. Approximately how many hours does your spouse work in an average week?

\_\_\_\_\_ Hours

39. What are your spouse's average hourly earnings (before deductions)?

\$\_\_\_\_\_ Dollars per hour

40. What is your best estimate of your own family income *last year* (1968)?

CONSIDER ANNUAL INCOME FROM ALL SOURCES BEFORE TAXES.  
INCLUDE YOUR OWN EARNINGS AND THOSE OF YOUR SPOUSE. CIRCLE ONLY ONE ANSWER.

Less than \$1,000 . . . . .	0	\$5,000-\$6,999 . . . . .	5
\$1,000-\$1,999. . . . .	1	\$7,000-\$9,999 . . . . .	6
\$2,000-\$2,999. . . . .	2	\$10,000-\$14,999 . . . . .	7
\$3,000-\$3,999. . . . .	3	\$15,000 or more . . . . .	8
\$4,000-\$4,999. . . . .	4		

■ ABOUT YOUR HIGH SCHOOL YEARS ■

41. What type of course or program did you take in high school?

College preparatory . . . . .	0
General (noncollege preparatory). . . . .	1
Business or commercial . . . . .	2
Vocational or technical. . . . .	3
Other (Please specify): _____	4

42. How much high school education did you complete?

One year . . . . .	0	Four years*— did not graduate. . . . .	3
Two years . . . . .	1	Four years — graduated . . . . .	4
Three years . . . . .	2	None . . . . .	5

43. In what year did you graduate or leave high school?

19 \_\_\_\_

44. What was your average grade in high school? If you do not have a record of your actual average grade, give your best estimate.

A or A+ (93+) . . . . .	0	B- (80-82). . . . .	4
A- (90-92) . . . . .	1	C+ (77-79) . . . . .	5
B+ (87-89) . . . . .	2	C (70-76) . . . . .	6
B (83-86). . . . .	3	D (65-69) . . . . .	7

45. How do you feel about the education you received at the high school you attended?

CIRCLE ONE NUMBER FOR EACH STATEMENT TO DESCRIBE HOW YOU FEEL ABOUT YOUR EDUCATION AT THE HIGH SCHOOL YOU ATTENDED.

	Agree Strongly	Agree Somewhat	Do Not Agree
Gave me new ideas about the type of work I wanted to do. . . . .	2	1	0
Should have placed more emphasis on vocational and technical programs . . . . .	2	1	0
Should have placed more emphasis on basic academic subjects (math, science, English, etc.) . . . . .	2	1	0
Did not offer enough practical work experience . . . . .	2	1	0
Provided me with counseling which enabled me to continue my education . . . . .	2	1	0
Provided me with counseling which enabled me to find employment . . . . .	2	1	0

46. Indicate how much course work you took in each subject listed below while you were in high school (9th through 12th grades).

CIRCLE THE APPROPRIATE NUMBER OF YEARS FOR EACH SUBJECT.

<u>Course</u>	<u>Number of Years</u>										
Agriculture courses . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Business education (typing, shorthand, bookkeeping, distributive education) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
English courses (drama, literature, speech, journalism) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Foreign languages . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Home economics courses . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Industrial arts (general shop, woodworking, metalworking. <i>Not job-training courses</i> ) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Mathematics courses (algebra, geometry, trigonometry) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Science courses (biology, chemistry, general science, physics) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Social science courses (history, civics, economics) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	
Trade and industrial courses (auto mechanics, foundry, etc.) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+	

47. In what type of community did you live during your last year in high school?

In the open country or in a farming community . . . . .	0
In a small town with fewer than 10,000 people that was not a suburb of a larger place . . . . .	1
In a medium size city (10,000-100,000 people) . . . . .	2
In a suburb of a medium size city . . . . .	3
In a large city (100,000 to 500,000 people) . . . . .	4
In a suburb of a large city . . . . .	5
In a very large city (over 500,000 people) . . . . .	6
In a suburb of a very large city . . . . .	7

48. During your high school years, did you ever consider going to a *four-year* college?

Yes . . . . . 0 No . . . . . 1

49. Why did you decide to enroll in a two-year college rather than a four-year college? CIRCLE ALL THAT APPLY.

- I *did* enroll at a four-year college, but I left before completing course or degree work. . . . . 1
- My test scores were not good enough for admittance to a four-year college . . . . . 1
- My high school grades were not good enough for admittance to a four-year college . . . . . 1
- I was put on the waiting list at a four-year college, so I decided to enroll at a two-year college instead . . . 1
- I could not afford to attend a four-year college. . . . . 1
- Other (Please specify):\_\_\_\_\_ 1

50. Please record below the information about other educational institutions or training programs you have attended since you graduated or left high school. Be sure to *include all* schools you have attended.

If you have attended no other school since high school, please check here ☐

Type of Institution (e.g., 4-year college, 2-year college, special military program, business school)	Dates Attended (e.g., 1966-1967)	Degree Received (e.g., none)	Reason for Leaving (e.g., could not afford to stay)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Thank you for completing the questionnaire. We would be glad to have any comments you might like to add.

**THE BUREAU OF SOCIAL SCIENCE RESEARCH** is a nonprofit institution devoted to research and training in the social sciences. Established in 1950 as a university-affiliated research center, the Bureau was separately incorporated in the District of Columbia in 1956.

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- low income families and public assistance
- human behavior under stress
- drug usage
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- support of higher education
- two-year and five-year follow-ups of college graduates
- effectiveness of educational training programs
- effectiveness of vocational and technical education
- the use of technology in public schools

**NO ENVELOPE OR POSTAGE NECESSARY TO MAIL THIS QUESTIONNAIRE**

TO MAIL:

Open back flap, moisten gummed edge, fold, and seal to front cover. Business reply panel will now be visible, and questionnaire may be mailed flat.

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**BUREAU OF SOCIAL SCIENCE RESEARCH, INC.**  
**1200 SEVENTEENTH STREET, N.W.**  
**WASHINGTON, D.C. 20036**







BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

1200 SEVENTEENTH STREET, N.W., WASHINGTON, D. C. 20036  
TELEPHONE (202) 223-4300

ELEANOR P. GODFREY  
RESEARCH ASSOCIATE

Dear Staff Member:

The rapid development in the last twenty years of a variety of postsecondary educational opportunities has changed the complexion of American higher education. The attached questionnaire is part of a major research effort sponsored by the U. S. Office of Education to survey programs, faculty and students simultaneously in all types of public two-year colleges and vocational-technical centers.

In addition to providing current information about institutional programs and personnel, we hope to provide a base line from which to measure future change through follow-up studies of a sample of institutions, faculty, and students at periodic intervals.

The first phase of the national study will include some 100 institutions, 5,000 faculty members, and 15,000 students. Our objective in the faculty questionnaire is to look at the role of the faculty member in the two-year college or area center; his professional preparation, career course, and teaching environment, and his opinions and concerns about the future of his institution.

Your replies will not only be your voice in the discussion, but will represent other professionals of like opinion in similar educational institutions. All replies will be held in confidence. No school or individual will be identified without permission.

Your participation will be greatly appreciated.

Sincerely,

*Eleanor P. Godfrey*  
Eleanor P. Godfrey

EPG/as

TRUSTEES: W. PHILLIPS DAVISON  
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ROBERT T. BOWER  
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GEORGE GALLUP  
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**BUREAU OF SOCIAL SCIENCE RESEARCH, INC.**

Washington, D. C. 20036

**STUDY OF COMMUNITY COLLEGES AND VOCATIONAL-TECHNICAL EDUCATION CENTERS**

**FACULTY QUESTIONNAIRE**

PLEASE FILL OUT THIS QUESTIONNAIRE AT YOUR EARLIEST CONVENIENCE.  
ANSWER EACH QUESTION BY CIRCLING THE NUMBER TO THE RIGHT OF THE  
ANSWER YOU CHOOSE. TO RETURN TO US: FOLLOW INSTRUCTIONS UNDER  
FLAP OF BACK COVER. ALL REPLIES WILL BE HELD IN CONFIDENCE.

■ **CURRENT OCCUPATIONAL INFORMATION** ■

Name of the college or technical school where you are employed?

Name of School	City	State
----------------	------	-------

1. Including this year, how many years have you been employed by this institution?

Number of years employed \_\_\_\_\_

2. Please circle the number(s) to the right of the most appropriate description of your major job at this institution this term (Spring 1969). CIRCLE THE NUMBERS FOR ALL THAT APPLY.

	<u>Full Time</u>	<u>Part Time</u>
Teacher . . . . .	0	1
Counselor . . . . .	0	1
Administrator (Title: _____)	0	1

3. **FOR TEACHING FACULTY:** Please provide the information indicated below about your *current* teaching assignment. If you teach more than one course, give your major assignment first. Include lecture, shop, laboratory, and tutorial instruction.

<u>Subject(s) Taught</u>	<u>Class Hours Per Week</u>	<u>Average Class Size</u>	<u>Total Years Taught Subject (including this year)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total class hours per week \_\_\_\_\_ Do not teach. . . . . ☐

4. Do you have any of the following responsibilities or duties? CIRCLE THE NUMBERS FOR ALL THAT APPLY.

No nonteaching assignment . . . . .	1	Athletic coach . . . . .	1
Department chairman . . . . .	1	Student activity sponsor (e.g., club or class advisor) . . . . .	1
Academic advisor, counselor. . . . .	1	Curriculum committee . . . . .	1
Vocational advisor, counselor . . . . .	1		
Other school committee (Specify): _____			1

5. What will be the total standard contract salary that you expect to receive *from this institution* this academic year (1968-69)? PLEASE INDICATE YOUR SALARY TO THE NEAREST THOUSAND DOLLARS (e.g., \$5,000).

Terms of standard contract in months \_\_\_\_\_

Salary from standard contract. .\$. \_\_\_\_\_ (to nearest thousand)

6. Are you *currently* employed either full-time or part-time (less than 35 hours a week) in a job outside this educational institution?

Yes, employed full-time (35 hours or more). . . . .	0
Yes, employed part-time (1-34 hours). . . . .	1
Have no outside job . . . . .	2

6a. IF YES: In what type of occupation?

\_\_\_\_\_

6b. IF YES: What will be your total earnings outside this educational institution this year (1968-69)? PLEASE INDICATE YOUR EARNINGS BEFORE TAXES TO THE NEAREST THOUSAND DOLLARS (e.g., \$1,000).

\$ \_\_\_\_\_ (to nearest thousand)

7. If you are currently employed by any private or public educational institution other than the institution through which you received this questionnaire, please give the type of institution below.

Type of institution _____	1
No such employment . . . . .	0

8. Please indicate your approximate *total family income* for 1968. Consider annual income from ALL sources before taxes.

Less than \$5,000 . . . . .	0	\$15,000-\$19,999. . . . .	4
\$5,000-\$6,999 . . . . .	1	\$20,000-\$24,999. . . . .	5
\$7,000-\$9,999 . . . . .	2	\$25,000 or more . . . . .	6
\$10,000-\$14,999 . . . . .	3		

9. Age:

24 and below . . . . .	0	35-39. . . . .	3	50-54 . . . . .	6
25-29. . . . .	1	40-44. . . . .	4	55-59 . . . . .	7
30-34. . . . .	2	45-49. . . . .	5	60 and over . . . . .	8

10. Sex:

Male . . . . .	0	Female . . . . .	1
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11. Current marital status:

Never married . . . . .	0	Married, children. . . . .	2
Married, no children. . . . .	1	Other (widowed, divorced, separated) . . . . .	3

12. Are you a member of one of the following ethnic groups?

American Indian . . . . .	0	Negro . . . . .	3
Cuban. . . . .	1	Oriental. . . . .	4
Mexican . . . . .	2	Puerto Rican . . . . .	5
None of the above . . . . .		6	

■ PREPARATION AND TRAINING ■

13. For each of the following degrees you hold, please indicate (1) your major subject field, (2) your minor field, (3) the year of award, and (4) the type of institution granting the degree, using the code numbers given at the bottom of the page.

Type of Degree		Major	Minor	Year of Award	Code for Institution*
A.A., A.A.S., A.S. . . . .	1	_____	_____	_____	_____
B.A., B.S. . . . .	2	_____	_____	_____	_____
B. Ed. . . . .	3	_____	_____	_____	_____
M.A., M.S. . . . .	4	_____	_____	_____	_____
M. Ed. . . . .	5	_____	_____	_____	_____
Ph.D. . . . .	6	_____	_____	_____	_____
Ed. D. . . . .	7	_____	_____	_____	_____
Other _____	8	_____	_____	_____	_____

No degree beyond high school diploma. . . . . ☐

14. Are you currently working on a degree?

Yes . . . . . 0 No . . . . . 1

14a. IF YES: Please indicate the type of degree (MA, BA, etc.), your major and minor fields of specialization, and the semester or quarter hours you have completed.

Type of Degree	Major	Minor	Number of Hours Completed	
			Semester	Quarter
_____	_____	_____	_____	_____

14b. IF YES: When do you expect to get the degree and from what type of institution? Use the institutional code numbers listed below.

Year Expect Degree      Code for Institution\*

\*USE THE FOLLOWING CODES FOR TYPE OF INSTITUTION GRANTING DEGREE

Public college or university . . . . .	1	Private college or university . . . . .	3
Public teachers college . . . . .	1	Private teachers college . . . . .	4
Public junior college, technical institute . . . . .	2	Private junior college, technical institute . . . . .	5
Other (Please specify): _____			6

15. Other than work required for whatever degree you may be working on, have you taken any additional academic training or technical training during the last 12 months (since June 1968)?

Yes . . . . . 0 No . . . . . 1

15a. IF YES: Please give type of training you have taken, the subject covered, and indicate how useful this additional training has been for your present assignment.

Type of Training	Major Subject	Very Useful	Somewhat Useful	Of Little Use
_____	_____	2	1	0
_____	_____	2	1	0
_____	_____	2	1	0

16. What type of inservice training program do you feel would be most valuable to you in your present position?

Subject matter: \_\_\_\_\_

Type of program: \_\_\_\_\_

Time offered: During school year . . . . . 0 Summer . . . . . 1

Preferred length of program: \_\_\_\_\_

17. How would you rate the adequacy of the training you have received in each of the following areas?

PLEASE CIRCLE ONE ANSWER FOR EACH SUBJECT AREA.

	Good	Adequate	Inadequate	None
1. Subject matter preparation for major current assignment . . . . .	3	2	1	0
2. Subject matter preparation for other current assignments . . . . .	3	2	1	0
3. Managing classroom routines, discipline, etc. . . . .	3	2	1	0
4. Utilizing innovative teaching methods . . . . .	3	2	1	0
5. Understanding students from another cultural background . . . . .	3	2	1	0
6. Preparing course material for the slow learner . . . . .	3	2	1	0
7. Preparing course material for the above average student . . . . .	3	2	1	0
8. Working in an administrative bureaucracy . . . . .	3	2	1	0
9. Working with community leaders . . . . .	3	2	1	0
10. Motivating students to learn . . . . .	3	2	1	0
11. Advising students about course selections . . . . .	3	2	1	0
12. Advising students about personal problems . . . . .	3	2	1	0
13. Making curriculum content relevant to student experience . . . . .	3	2	1	0
14. Working as a member of an educational team. . . . .	3	2	1	0

18. In which of the areas listed in Question 17 do you consider it most essential for someone in your position to be skilled? Please list the *three* areas you have found to be most critical by ENTERING THE NUMBERS TO THE LEFT OF YOUR FIRST, SECOND, AND THIRD CHOICES BELOW.

1st choice \_\_\_\_\_ 2nd choice \_\_\_\_\_ 3rd choice \_\_\_\_\_

19. Are there other areas, not listed in Question 17, in which it is essential for someone in your position to be skilled? Please list these subject areas below.

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20. Suppose you were designing a two-year master's degree program of 39 hours for preparing both academic and technical teachers for two-year postsecondary institutions. How many hours would you assign to each of the following categories for each type of teacher? Put a "0" for any subject category you think should be dropped from either program.

<u>Two-Year Master's Degree Program</u>										<u>Credit Hours For Academic Teachers</u>	<u>Credit Hours For Technical Teachers</u>
Major subject field . . . . .										_____	_____
Teaching practicum . . . . .										_____	_____
Research, thesis . . . . .										_____	_____
Learning theory . . . . .										_____	_____
Teaching methodology and techniques . . . . .										_____	_____
Role and purpose of the two-year postsecondary institution . . . . .										_____	_____
Student, faculty, and administrative relations . . . . .										_____	_____
Other (Specify): _____										_____	_____
Total										39	39

21. Assuming you could find persons with the qualifications desired, how much formal education, how much work experience outside education, and how much teaching experience would you require in recruiting academic and technical teachers for your type of institution?

		<u>Minimum Requirements</u>	
		<u>Academic Teachers</u>	<u>Technical Teachers</u>
Formal education . . . . .		_____	_____
Work experience . . . . .	_____ Years		_____ Years
Teaching experience . . . . .	_____ Years		_____ Years

■ EDUCATIONAL AND OCCUPATIONAL BACKGROUND ■

22. For each of the national professional educational organizations listed below, please indicate whether you are a member, and if so, how active you are in the organization's activities.

PLEASE ANSWER FOR EACH ORGANIZATION.

<u>Educational Organization</u>	<u>Active Participant</u>	<u>Attend Meetings Regularly</u>	<u>Member, But Inactive</u>	<u>Not a Member</u>
American Association of University Professors. . . . .	3	2	1	0
National Faculty Association of Community and Junior Colleges . . . . .	3	2	1	0
American Federation of Teachers or an Affiliated Local . . . . .	3	2	1	0
American Personnel and Guidance Association . . . . .	3	2	1	0
American Vocational Association or any affiliate organizations . . . . .	3	2	1	0
National Education Association or affiliated state or local education association . . . . .	3	2	1	0
Professional society in my major subject field				
(Specify): _____	3	2	1	0
Other professional educational organization				
(Specify): _____	3	2	1	0

23. Please indicate your total years of employment in education (*including this year*), showing separately experience in teaching, counseling, and administration by type of school. If you held more than one type of position for any particular year, count only your *major activity* for that year.

<u>Type of School</u>	<u>Number of Years</u>		
	<u>Teaching</u>	<u>Counseling</u>	<u>Administration</u>
High School . . . . .	_____	_____	_____
Junior college . . . . .	_____	_____	_____
Technical institute or vocational technical center . . . . .	_____	_____	_____
Four-year college, university. . . . .	_____	_____	_____
Other educational institution			
(Specify): _____	_____	_____	_____
Total Years . . . . .	_____	_____	_____



24. *Excluding* summer work, part-time work while a student, and compulsory military service, have you ever been employed, either full-time or part-time, outside of education?

Yes . . . . . 0 No . . . . . 1

- 24a. IF YES: Please give the number of years employed in each of the following types of work and your total years of full-time and part-time outside employment.

	Total Years Employed	
	<u>Full-time</u>	<u>Part-time</u>
Business or sales . . . . .	_____	_____
Skilled trades . . . . .	_____	_____
Farming, agricultural services . . . . .	_____	_____
Social service, recreation . . . . .	_____	_____
Science or engineering . . . . .	_____	_____
Graphic arts . . . . .	_____	_____
Performing arts . . . . .	_____	_____
Health services . . . . .	_____	_____
Career military service . . . . .	_____	_____
Other (Specify): _____	_____	_____
Total Years . . . . .	_____	_____

25. If you are married, is your spouse currently employed outside the home?

Yes . . . . . 0 No . . . . . 1 Not married . . . . . 2

26. What is (was) the *main occupation* of your father, mother, and husband or wife? If more than one, circle the number corresponding to the occupation in which he or she has spent the most time.  
CIRCLE ONE NUMBER IN EACH COLUMN.

	<u>Father</u>	<u>Mother</u>	<u>Spouse</u>
Clerical or sales (bookkeeper, typist, real estate salesman, etc.) . . . . .	00	00	00
Skilled craftsman or foreman (baker, electrician, mechanic, factory foreman, etc.) . . . . .	01	01	01
Professional (pharmacist, engineer, artist, etc.) . . . . .	02	02	02
Teacher or other educator (school counselor, principal, etc.) . . . . .	03	03	03
Laborer (longshoreman, gas station attendant, etc.) . . . . .	04	04	04
Service worker (policeman, waiter, barber, etc.) . . . . .	05	05	05
Technician (draftsman, nurse, laboratory technician, etc.) . . . . .	06	06	06
Semiskilled worker (truck driver, factory machine operator, meat cutter, etc.) . . . . .	07	07	07
Proprietor, manager, official, executive (farm manager, contractor, company officer, etc.) . . . . .	08	08	08
Homemaker . . . . .	—	11	11
Student . . . . .	—	—	12
Other (Please specify): _____	09	09	09
Not married . . . . .	—	—	14

If your mother was the *main or only* wage-earner, please check here. ☐

27. How much education has your father, mother and husband or wife completed?

CIRCLE ONE NUMBER IN EACH COLUMN.

	Father	Mother	Spouse
Grade school or less . . . . .	0	0	0
Some high school . . . . .	1	1	1
High school graduate . . . . .	2	2	2
Post high school, technical or business school . . . . .	3	3	3
Some college . . . . .	4	4	4
College graduate . . . . .	5	5	5
Graduate or professional degree . . . . .	6	6	6
Not married . . . . .	—	—	9

28. In what type of community did you spend the longest period of time while you were growing up?

CIRCLE ONE ANSWER ONLY.

In the open country or in a farming community . . . . .	0
In a small town with fewer than 10,000 people that was not a suburb of a larger place . . . . .	1
In a medium size city (10,000 to 100,000 people) . . . . .	2
In a suburb of a medium size city . . . . .	3
In a large city (100,000 to 500,000 people) . . . . .	4
In a suburb of a large city . . . . .	5
In a very large city (over 500,000 people) . . . . .	6
In a suburb of a very large city . . . . .	7

### ■ CAREER DECISIONS ■

29. When did you first seriously consider education as a profession?

Always wanted to be a teacher . . . . .	00
During high school . . . . .	01
When choosing a college . . . . .	02
During undergraduate studies . . . . .	03
During graduate studies . . . . .	04
While in the military service . . . . .	05
After starting a career in another occupation (Specify occupation): _____ . . . . .	06
After teaching temporarily, substituting, or tutoring . . . . .	07
When children became old enough so I could work outside the home . . . . .	08
After retirement from a career in another occupation . . . . .	09
Other (Specify): _____ ) . . . . .	10
Do not plan to make education my profession . . . . .	11

30. What was your principal occupation immediately before you took your present job at this institution?

Undergraduate student . . . . .	0	Different job at this school . . . . .	4
Graduate student . . . . .	1	Staff member in another school. . . . .	5
Houswife. . . . .	2	Employed outside education . . . . .	6
Career military service . . . . .	3	Other (Specify): _____	7

31. Why did you choose to work in a junior college, technical institute, or vocational-technical center?

32. How satisfied are you with the following aspects of your job?

	<u>Very</u> <u>Satisfied</u>	<u>Satisfied</u>	<u>Dissatisfied</u>	<u>No</u> <u>Opinion</u>
1. Job security . . . . .	3	2	1	0
2. Job prestige . . . . .	3	2	1	0
3. Opportunity for attending professional meetings. . . . .	3	2	1	0
4. Opportunity for inservice training. . . . .	3	2	1	0
5. Opportunity for research. . . . .	3	2	1	0
6. Your rapport with teaching colleagues. . . . .	3	2	1	0
7. Your rapport with students . . . . .	3	2	1	0
8. Your rapport with administrative colleagues . . . . .	3	2	1	0
9. Intellectual atmosphere . . . . .	3	2	1	0
10. Reputation of the school. . . . .	3	2	1	0

32a. Which three of the above items are most important to you as an educator? ENTER THE NUMBERS TO THE LEFT OF YOUR FIRST, SECOND, AND THIRD CHOICES BELOW.

1st choice \_\_\_\_\_ 2nd choice \_\_\_\_\_ 3rd choice \_\_\_\_\_

33. What are your present long-range career plans?

Expect to continue in essentially the same type of job until retirement . . . . .	0
Expect to stay in the field of education, but in a different type of job. (Specify): _____	1
Expect to leave education to devote my time to homemaking; would not want to return later . . . . .	2
Expect to leave education for homemaking; but would like to return later . . . . .	3
Expect to leave education for another occupation. (Specify): _____	4
Other (Specify): _____	5

■ SCHOOL POLICY ■

There has recently been considerable discussion about the role of various kinds of postsecondary institutions in our society. The last group of questions is concerned with some of these issues as they affect *your* school.

34. What type of student does your institution attract (e.g., age, racial composition, academic ability, class background, educational goals, career plans, etc.)?

35. Would you like to see some changes in the makeup of the student body? (e.g., would you like more or less of a certain type of student?)

36. Who has the *primary responsibility* for each of the following decision areas affecting the program in your school or college? PLEASE CIRCLE ONE ANSWER FOR EACH ITEM.

	Board of Trustees	Central Administration	Faculty Committee	Individual Teacher
1. School philosophy and goals . . . . .	3	2	1	0
2. Budget planning . . . . .	3	2	1	0
3. Admission criteria . . . . .	3	2	1	0
4. Degree/certificate requirements . . . . .	3	2	1	0
5. Curricula planning and development . . . . .	3	2	1	0
6. Specific course content . . . . .	3	2	1	0
7. Academic student dismissal . . . . .	3	2	1	0
8. Disciplinary student dismissal . . . . .	3	2	1	0
9. Student evaluation procedures . . . . .	3	2	1	0
10. Selection of new faculty . . . . .	3	2	1	0
11. Selection of administrators . . . . .	3	2	1	0
12. Faculty salaries and fringe benefits . . . . .	3	2	1	0
13. Faculty promotions . . . . .	3	2	1	0
14. Faculty evaluation procedures . . . . .	3	2	1	0
15. Resolution of faculty grievances . . . . .	3	2	1	0
16. Resolution of student grievances . . . . .	3	2	1	0

37. In which of areas listed in Question 36, if any, do you think that the *teaching faculty* should have more responsibility than they now have? Please use the numbers *to the left* of each item in writing your reply.

Comment: \_\_\_\_\_

38. In which of these areas, if any, do you think that the *students* should have more responsibility than they now have? Please use the numbers *to the left* of each item in writing your reply.

Comment: \_\_\_\_\_

39. How would you rate the adequacy of each of the following at your present institution?

PLEASE CIRCLE ONE ANSWER FOR EACH.

	Excel- lent	Above Average	Average	Below Average	Unsatis- factory	Not Applicable to This School	No Opinion
Vocational Counseling . . . . .	6	5	4	3	2	1	0
Academic counseling . . . . .	6	5	4	3	2	1	0
Quality of vocational instruction . . . . .	6	5	4	3	2	1	0
Quality of academic instruction . . . . .	6	5	4	3	2	1	0
Job placement service . . . . .	6	5	4	3	2	1	0
Provisions for student scholarships . . . . .	6	5	4	3	2	1	0
Provisions for student loans . . . . .	6	5	4	3	2	1	0
Remedial, tutorial services . . . . .	6	5	4	3	2	1	0
Suitability of vocational courses for local job market . . . . .	6	5	4	3	2	1	0
Suitability of vocational courses for further vocational training . . . . .	6	5	4	3	2	1	0
Suitability of academic courses for a state college . . . . .	6	5	4	3	2	1	0
Suitability of academic courses for a major university . . . . .	6	5	4	3	2	1	0
Board of trustee support for vocational programs . . . . .	6	5	4	3	2	1	0
Board of trustee support for academic programs . . . . .	6	5	4	3	2	1	0

40. Providing a range of educational and training opportunities is the long-term goal of our higher education system. What role would you like to see *your* institution play in this scheme?

PLEASE CIRCLE ONE ANSWER FOR EACH STATEMENT.

	<u>Yes</u>	<u>No</u>
Increase the number of transfer programs . . . . .	0	1
Increase the number of occupational programs . . . . .	0	1
Increase the number of remedial offerings . . . . .	0	1
Open one or more additional campuses. . . . .	0	1
Become a four-year college . . . . .	0	1
Increase the number of adult (continuing) education courses . . . . .	0	1
Specialize in lower division college work preparing students for the state university. . . . .	0	1
Specialize in lower division college work preparing students for any college or university . . . . .	0	1
Specialize in occupational training for immediate job placement in the local job market . . . . .	0	1
Specialize in occupational training, but not necessarily for placement in this geographical area . . . . .	0	1
Accept only high school graduates (or those who pass an equivalency examination) . . . . .	0	1
Accept only those who placed in the upper half of their high school graduating class . . . . .	0	1
Accept any student, regardless of previous training or experience . . . . .	0	1
Other (Specify): _____ . . . . .	0	1

Thank you for completing the questionnaire. We would be pleased to have any comments you might like to add.

**THE BUREAU OF SOCIAL SCIENCE RESEARCH** is a nonprofit institution devoted to research and training in the social sciences. Established in 1950 as a university-affiliated research center, the Bureau was separately incorporated in the District of Columbia in 1956.

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- effectiveness of vocational and technical education
- the use of technology in public schools

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Open back flap, moisten gummed edge, fold, and seal to front cover. Business reply panel will now be visible, and questionnaire may be mailed flat.

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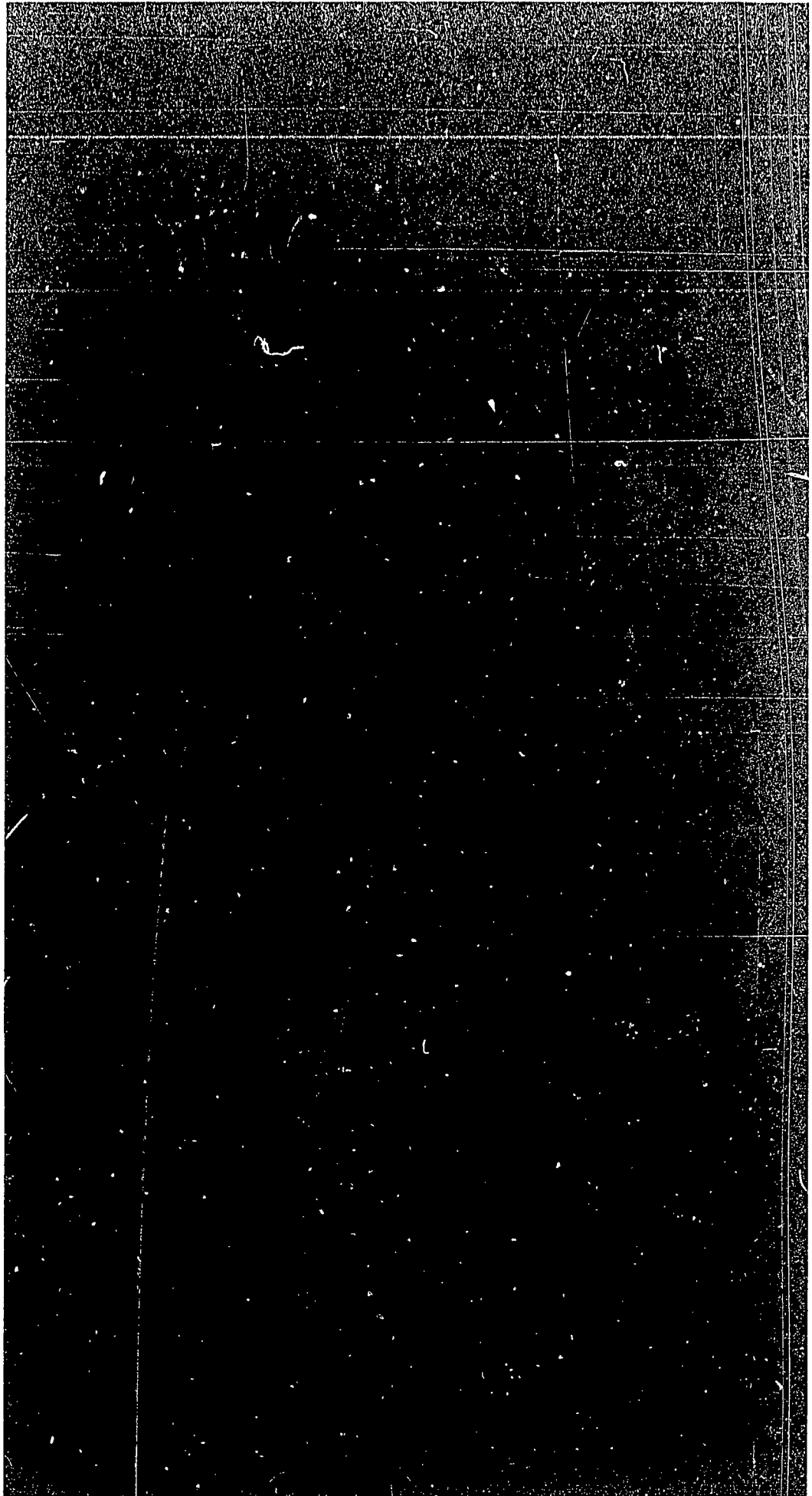
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BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

1200 SEVENTEENTH STREET, N.W., WASHINGTON, D. C. 20036

TELEPHONE (202) 223-4300

ELEANOR P. GODFREY  
RESEARCH ASSOCIATE

Dear Graduate:

The Bureau of Social Science Research is beginning a study of two-year colleges and technical centers. The study, sponsored by the U. S. Office of Education, seeks to establish a base line of information from which to measure future growth and development.

As a former student in one of these schools, the information you are able to give will help us make our educational system more effective. We are especially interested in learning about your employment and educational experiences since June 1967.

Your name and address were selected at random from a list provided by your school. All replies will be held in confidence and no individual will be identified in any report of the study.

Your participation will be greatly appreciated.

Sincerely,

*Eleanor P. Godfrey*  
Eleanor P. Godfrey

EPG/as

TRUSTEES: W. PHILLIPS DAVISON  
ALFRED WINSLOW JONES

ROBERT T. BOWER  
PAUL F. LAZARSFELD

ELLSWORTH BUNKER  
HERBERT J. MILLER, JR.

G. FRANKLIN EDWARDS  
M. BREWSTER SMITH

GEORGE GALLUP  
PAUL A. SMITH

BUREAU OF SOCIAL SCIENCE RESEARCH, INC.  
Washington, D. C. 20036

STUDY OF COMMUNITY COLLEGES AND VOCATIONAL-TECHNICAL EDUCATION CENTERS

GRADUATE QUESTIONNAIRE

PLEASE FILL OUT THIS QUESTIONNAIRE AT YOUR EARLIEST CONVENIENCE.  
UNLESS OTHERWISE INSTRUCTED, ANSWER EACH QUESTION BY CIRCLING THE  
NUMBER TO THE RIGHT OF THE ANSWER YOU CHOOSE.

TO RETURN TO US: FOLLOW INSTRUCTIONS UNDER FLAP OF BACK COVER.  
ALL REPLIES WILL BE HELD IN CONFIDENCE.

Please note that the questions asked in the first part of the questionnaire have to do with the *school* (junior college, technical institute, vocational-technical center) which you *attended until June 1967 and from which you obtained a degree or where you completed a program in June 1967.*

Please record the name of that school here. \_\_\_\_\_

■ ABOUT YOUR EDUCATION IN THAT SCHOOL ■

1. What degree did you receive from that school in June 1967?

- Associate of Arts or Science . . . . . 0
- Certificate in \_\_\_\_\_ 1  
(specify area)
- Other degree (Please specify): \_\_\_\_\_ 2

2. Were you a full-time or part-time student at that school?

- Full-time . . . . . 0
- Part-time (less than  $\frac{1}{2}$  of full-time load) . . . . . 1
- Both full-time and part-time . . . . . 2

3. Did you attend day or evening classes?

- Day only . . . . . 0      Evening only . . . . . 1      Both day and evening . . . . . 2

4. When did you *first* enroll at that school?

\_\_\_\_\_  
Month                      Year

5. What was your major course or field of study in the school (junior college, technical institute, or vocational-technical center) you attended until June 1967?

Agriculture . . . . .	00
Business and commerce (accounting, management, etc.) . . . . .	01
Distributive education (retailing, salesmanship, etc.) . . . . .	02
Education (elementary, secondary, special) . . . . .	03
Engineering . . . . .	04
Health occupations (nursing, dental assisting, etc.) . . . . .	05
Home economics . . . . .	06
Humanities and/or arts (English, journalism, fine arts, music, foreign language, philosophy, religion) . . . . .	07
Natural and physical science (biology, chemistry, earth science, mathematics, physics, other physical science) . . . . .	08
Office occupations (secretarial, bookkeeping, etc.) . . . . .	09
Physical education . . . . .	10
Social science (economics, history, psychology, political science, sociology and anthropology) . . . . .	11
Technical occupations (data processing, construction technology, etc.) . . . . .	12
Trade and industrial occupations (auto mechanics, carpentry, etc.) . . . . .	13
Other (Please specify): _____	14

6. While attending that school, where did you live?

In my own home or apartment . . . . .	0
With my parents or relatives (not spouse) . . . . .	1
In dormitory or other school housing . . . . .	2
Other (Please specify): _____	3

7. Where is that school located relative to your residence during your last year in high school?

Same town or city as my high school . . . . .	0
Different town or city, but <i>within daily commuting distance</i> . . . . .	1
Different town or city, and <i>not within commuting distance</i> . . . . .	2
Different state, but <i>within daily commuting distance</i> . . . . .	3
Different state and <i>not within commuting distance</i> . . . . .	4
Other (Please specify): _____	5

8. For each subject listed below: Indicate how much course work you took in the junior college, technical institute, or vocational-technical center you attended until June 1967. Count each semester or quarter as a separate course. CIRCLE THE APPROPRIATE NUMBER OF COURSES FOR EACH SUBJECT.

Subject	Number of Courses										
Mathematics . . . . .	0	1	2	3	4	5	6	7	8	9	10 or more
English (literature, drama, speech, journalism). . . . .	0	1	2	3	4	5	6	7	8	9	10 or more
Sciences (biology, physics, chemistry, etc.) . . . . .	0	1	2	3	4	5	6	7	8	9	10 or more
Vocational or technical education. . . . .	0	1	2	3	4	5	6	7	8	9	10 or more
Social sciences (history, economics, psychology, etc.) . . . . .	0	1	2	3	4	5	6	7	8	9	10 or more

9. Please give your frank opinion about the following items concerning that school. CIRCLE ONE ANSWER FOR EACH ITEM. CIRCLE THE NUMBERS IN ONE OF THE LAST 2 COLUMNS IF YOU HAVE HAD NO EXPERIENCE WITH THE SUBJECT OR IF THE ITEM DID NOT EXIST AT THE SCHOOL YOU ATTENDED UNTIL JUNE 1967.

	Excellent	Satisfactory	Poor	I Had No Experience With That	Did Not Exist
Quality of instruction . . . . .	4	3	2	1	0
Academic counseling . . . . .	4	3	2	1	0
Job or career counseling. . . . .	4	3	2	1	0
Student participation in the school's administrative and academic decisions . . . . .	4	3	2	1	0
Student activities (social, athletic, etc.) . . . . .	4	3	2	1	0
Congeniality of the student body . . . . .	4	3	2	1	0
Job placement service . . . . .	4	3	2	1	0
Intellectual atmosphere . . . . .	4	3	2	1	0
School reputation . . . . .	4	3	2	1	0
Availability of teachers outside classroom hours . . . . .	4	3	2	1	0
Student-teacher relations . . . . .	4	3	2	1	0

10. What problems did you have which interfered with your education at that school? CIRCLE ONE ANSWER FOR EACH STATEMENT TO DESCRIBE WHETHER IT WAS A MAJOR PROBLEM, A MINOR PROBLEM, OR NO PROBLEM FOR YOU.

	<u>Major Problem</u>	<u>Minor Problem</u>	<u>No Problem</u>
1. Courses were too hard . . . . .	2	1	0
2. Inadequate high school preparation . . . . .	2	1	0
3. My job took too much time from my studies. . . . .	2	1	0
4. Found it hard to adjust to school routine . . . . .	2	1	0
5. School didn't offer the courses I wanted to take. . . . .	2	1	0
6. Worry over financial obligations (repayment of loan, support of dependents, etc.) . . . . .	2	1	0
7. My own ill health . . . . .	2	1	0
8. Had poor study habits . . . . .	2	1	0
9. Transportation to school was difficult. . . . .	2	1	0
10. Many courses were a waste of time . . . . .	2	1	0
11. Family obligations took too much time. . . . .	2	1	0
12. Didn't feel a part of the school community . . . . .	2	1	0
13. Other (Please specify): _____	2	1	0

Of all the problems listed above, choose the one you consider was the *most important problem* which interfered with your education at the school you attended.

Comment: \_\_\_\_\_

11. What was your over-all average grade for all the time you attended that school? If you do not have a record of your actual average grade give your best estimate.

A or A+ (93+) . . . . .	0	B- (80-83) . . . . .	4
A- (90-92) . . . . .	1	C+ (77-79) . . . . .	5
B+ (87-89) . . . . .	2	C (70-76) . . . . .	6
B (83-86) . . . . .	3	D (65-69) . . . . .	7

12. How do you feel about the education you received at the school you attended until June 1967? CIRCLE ONE NUMBER FOR EACH STATEMENT TO DESCRIBE HOW YOU FEEL ABOUT YOUR EDUCATION AT THE SCHOOL YOU ATTENDED UNTIL JUNE 1967.

	<u>Agree Strongly</u>	<u>Agree Somewhat</u>	<u>Do Not Agree</u>
1. Gave me new ideas about the type of work I wanted to do . . . . .	2	1	0
2. Wasted precious time and delayed my career. . . . .	2	1	0
3. Provided training and education helpful in my work . . . . .	2	1	0
4. Had little effect on my career one way or another . . . . .	2	1	0
5. Made an important contribution to my general education . . . . .	2	1	0
6. Provided me with education and/or training I could not have afforded otherwise . . . . .	2	1	0
7. Makes it more likely that an employer will consider me for a responsible job . . . . .	2	1	0
8. Provided me with counseling which enabled me to continue my education . . . . .	2	1	0
9. Provided me with counseling which enabled me to find employment . . . . .	2	1	0

13. Of all the items in Question 12 above, which is the one you agree with *most strongly*?

Comment: \_\_\_\_\_

14. Again, looking back at your career at that school, did you have difficulty financing your education?

No, I had no difficulty . . . . .	0
Yes, I had some difficulty . . . . .	1
Yes, it was very difficult . . . . .	2
Other (Please specify): _____	3

■ ABOUT YOUR JOB EXPERIENCE ■

BEFORE JUNE 1967

15. Did you hold a job while you were going to that school? IF YOU HELD MORE THAN ONE JOB, PLEASE ANSWER THE FOLLOWING QUESTIONS FOR THE JOB YOU HELD LAST BEFORE LEAVING SCHOOL IN JUNE 1967.

Yes, a full-time job. (35 hours or more)	0
Yes, a part-time job. (1 to 34 hours)	1
No	2

IF YOU HELD EITHER A FULL-TIME OR PART-TIME JOB WHILE ATTENDING THAT SCHOOL, PLEASE COMPLETE QUESTIONS 16 THROUGH 18 OTHERWISE PROCEED TO QUESTION 19.

16. What kind of work did you do? (Describe your job in a few words, e.g., I was a cataloger in the school library; I assisted the manager in a super market; I was a typist.)

\_\_\_\_\_

17. Approximately how many hours did you work in an average week?

\_\_\_\_\_ Hours

18. What were your average hourly earnings (before deductions) on that job?

\$\_\_\_\_\_ Dollars per hour.

AFTER JUNE 1967

19. What did you do FIRST after completing your education at the school you attended until June 1967? OMIT SUMMER EMPLOYMENT OR SUMMER SCHOOL.

Sought work, but was unemployed.	0	Part-time school and part-time job	4
Full-time job (35 hours or more)	1	Part-time job (1 to 34 hours)	5
Full-time school or college	2	Full-time housewife	6
Military service	3		
Other (Please specify):			7

20. Have you ever held a FULL-TIME job since completing your education at that school?

Yes	0	No	1
-----	---	----	---



IF YOU HAVE EVER HELD A FULL-TIME JOB SINCE COMPLETING YOUR EDUCATION AT THAT SCHOOL, PLEASE COMPLETE QUESTIONS 21 THROUGH 26, OTHERWISE PROCEED TO QUESTION 27.

21. What kind of work did you do on your first FULL-TIME JOB after June 1967? (Describe your job in a few words, e.g., I was a typist; I did electrical repair work; I was a key punch operator.)

\_\_\_\_\_

22. How did you get that job?

On my own, without anyone's help . . . . . 0	Was already with same employer . . . . . 4
Private or state employment agency . . . . . 1	Through one of my instructors . . . . . 5
Through parent or relative . . . . . 2	Through school counselor . . . . . 6
Through a friend . . . . . 3	Through school placement office . . . . . 7
Other (Please specify): _____ 8	

23. When did you start on that job?

\_\_\_\_\_

Month                      Year

24. How long did that job last?

Still there. . . . . 0

Left in \_\_\_\_\_ of \_\_\_\_\_ . . . . . 1

Month                      Year

25. What were your hourly earnings (before deductions) on that job?

Started at \$ \_\_\_\_\_ Dollars per hour.

Worked up to \$ \_\_\_\_\_ Dollars per hour.

26. How many hours a week, on the average, did you work on that job?

\_\_\_\_\_ Hours per week.

- ▷ 27. What are you doing now?

Unemployed . . . . . 0	Part-time school and part-time job . . . . . 4
Full-time job (35 hours or more) . . . . . 1	Part-time job (1-34 hours). . . . . 5
Full-time school or college . . . . . 2	Full-time housewife . . . . . 6
Military service . . . . . 3	
Other (Please specify): _____ 7	

YOUR CURRENT EMPLOYMENT

IF YOU ARE CURRENTLY EMPLOYED FULL-TIME AT A JOB DIFFERENT THAN THE ONE YOU HAVE DESCRIBED ON PAGE 7, PLEASE COMPLETE QUESTIONS 28 THROUGH 32; OTHERWISE PROCEED TO QUESTION 33.

28. What kind of work do you do? (Describe your job in a few words, e.g., I am a secretary. I do electrical repair work.)

\_\_\_\_\_

29. How did you get this job?

On my own, without anyone's help . . . . . 0	Was already with same employer . . . . . 4
Private or state employment agency . . . . . 1	Through one of my instructors . . . . . 5
Through parent or relative . . . . . 2	Through school counselor . . . . . 6
Through a friend . . . . . 3	Through school placement office . . . . . 7
Other (Please specify): _____ 8	

30. When did you start on this job?

\_\_\_\_\_

Month	Year
-------	------

31. What are your hourly earnings (before deductions) on this job?

Started at \_\_\_\_\_ Dollars per hour.

Worked up to \_\_\_\_\_ Dollars per hour.

32. How many hours a week, on the average, do you work?

\_\_\_\_\_ Hours per week.

▷ 33. Since June 1967 have you ever experienced a period of time when you were unemployed and actively seeking a job?

Yes. Unemployed about \_\_\_\_\_ months . . . 1 No . . . . . 0

34. Since June 1967, was there any period in which you were NOT AVAILABLE FOR WORK (in military service, full-time school, extended illness, housewife)? CIRCLE ALL THAT APPLY.

Have always been available for work . . . . . 0

WAS NOT AVAILABLE FOR WORK BECAUSE OF:

Military service ( \_\_\_\_\_ months) . . . . . 1 Illness/disability ( \_\_\_\_\_ months) . . . . . 1

Full-time school ( \_\_\_\_\_ months) . . . . . 1 Full-time housewife ( \_\_\_\_\_ months) . . . . . 1

Other (Please specify): \_\_\_\_\_ for \_\_\_\_\_ months 1

35. Excluding the first and present job since June 1967, have you held any full-time jobs since June 1967?

Yes, number of full-time jobs \_\_\_\_\_ 1 No . . . . . 0

36. What occupation or type of work do you plan to make your life-time work? (If undecided, write "undecided".)

\_\_\_\_\_

■ ABOUT YOUR EDUCATION AFTER JUNE 1967 ■

37. Since completing your course work, program, or degree in June 1967, have you taken any additional education or training?

Yes, full-time . . . . 1 Yes, part-time (less than 3/4 of full-time load) . . . . 2 No. . . . 0

IF YOU HAVE HAD ADDITIONAL EDUCATION OR TRAINING SINCE JUNE 1967, COMPLETE QUESTIONS 38 THROUGH 44; OTHERWISE PROCEED TO QUESTION 45.

38. What type of education did you take? CIRCLE ALL THAT APPLY.

Four-year college or university . . . . . 1	Apprenticeship program . . . . . 1
Adult continuation courses . . . . . 1	Business/commercial school . . . . . 1
Correspondence courses . . . . . 1	Trade/technical school . . . . . 1
MDTA or work training program . . . . . 1	
Other (Please specify): _____	1

39. What was (is) your main purpose for seeking further education? CIRCLE THE MOST IMPORTANT REASON.

To further my general education . . . . .	0
To prepare for a career unrelated to my previous education . . . . .	1
To advance in my career. . . . .	2
To obtain additional degree(s) . . . . .	3
Other (Please specify): _____	4

40. What degree(s) or certificate(s) have you received since you completed your course or degree work in 1967? CIRCLE ALL THAT APPLY.

None . . . . . 1	Certificate in: _____ 1
Bachelor's degree . . . . . 1	Other degree (Please specify): _____ 1

41. What is (was) your major course or field of study in the school or program you attended after June, 1967?

Agriculture . . . . .	00
Business and commerce (accounting, management, etc.) . . . . .	01
Distributive education (retailing, salesmanship, etc.) . . . . .	02
Education (elementary, secondary, special) . . . . .	03
Engineering . . . . .	04
Health occupations (nursing, dental assisting, etc.) . . . . .	05
Home economics . . . . .	06
Humanities and/or arts (English, journalism, fine arts, music, foreign language, philosophy, religion) . . . . .	07
Natural and physical science (biology, chemistry, earth science, mathematics, physics, other physical science) . . . . .	08
Office occupations (secretarial, bookkeeping, etc.) . . . . .	09
Physical education . . . . .	10
Social science (economics, history, psychology, political science, sociology and anthropology) . . . . .	11
Technical occupations (data processing, construction technology, etc.) . . . . .	12
Trade and industrial occupations (auto mechanics, carpentry, etc.) . . . . .	13
Other (Please specify): _____	14

IF YOU HAVE TAKEN ADDITIONAL EDUCATION IN A FOUR-YEAR COLLEGE OR UNIVERSITY SINCE JUNE 1967, COMPLETE QUESTIONS 42 THROUGH 44; OTHERWISE PROCEED TO QUESTION 45.

42. When you transferred to that college or university, did you lose any credits or was all of your junior college, technical institute, or vocational-technical center course work accepted?

All credits were accepted . . . . .	0
I lost 1-6 credits . . . . .	1
I lost 7-12 credits . . . . .	2
I lost 13-18 credits . . . . .	3
I lost 19-30 credits . . . . .	4
I lost 31 or more credits . . . . .	5

43. In what fields did you lose credit? CIRCLE ALL THAT APPLY.

English . . . . .	1	Vocational or technical education . . . . .	1
Mathematics . . . . .	1	Social sciences . . . . .	1
Sciences . . . . .	1	Business or commercial courses . . . . .	1
Other (Please specify): _____			1

44. When you FIRST enrolled in that college or university, what was your standing?

- |   |   |   |   |
|---|---|---|---|
| First year student (1 to 30 credit hours) . . . . . | 0 | Third year student (61-90 credit hours) . . . . .   | 2 |
| Second year student (31-60 credit hours) . . . . .  | 1 | Fourth year student (91-120 credit hours) . . . . . | 3 |
| Special student (Please explain): _____             |   |   | 5 |
| Probationary student (Please explain): _____        |   |   | 6 |

▷ 45. Do you have plans for additional education or training?

- |  |   |
|--|---|
| I have no plans for further education or training. . . . .                         | 0 |
| I plan to continue my education at a four-year college or university . . . . .     | 1 |
| I plan to continue with the course or program I am currently enrolled in . . . . . | 2 |
| Other (Please specify): _____  | 3 |

46. What is the highest academic degree you intend to obtain? CIRCLE ONLY ONE ANSWER.

- |  |   |
|--|---|
| None . . . . .                           | 0 |
| Certificate in _____                     | 1 |
| Associate of Arts (A.A., A.S.) . . . . . | 2 |
| Bachelor's degree (B.A., B.S.) . . . . . | 3 |
| Master's degree (M.A., M.Ed.) . . . . .  | 4 |
| Ph.D. or Ed.D. . . . .                   | 5 |
| Other (Please specify): _____            | 6 |

■ ABOUT YOUR PARENTS AND YOU ■

47. What is your current marital status?

- |                               |   |  |   |
|-------------------------------|---|--|---|
| Never married . . . . .       | 0 | Married, children. . . . .                     | 2 |
| Married, no children. . . . . | 1 | Other (separated, widowed, divorced) . . . . . | 3 |

48. How much education did your father, mother, and husband or wife complete? ANSWER FOR THE HIGHEST LEVEL OF EDUCATION COMPLETED BY EACH.

<u>Education</u>	CIRCLE ONE NUMBER FOR EACH:		
	<u>Father</u>	<u>Mother</u>	<u>Spouse</u>
Grade school or less . . . . .	0	0	0
Some high school . . . . .	1	1	1
High school graduate . . . . .	2	2	2
Post high school technical or business school . . . . .	3	3	3
Some college . . . . .	4	4	4
College graduate . . . . .	5	5	5
Graduate or professional degree . . . . .	6	6	6
Don't know . . . . .	7	7	7
Not married . . . . .	—	—	9

49. What is (was) the MAIN OCCUPATION of your father and your mother? If you were raised by a stepfather, answer for him. If your husband or wife is employed, please check her (his) occupation.

	CIRCLE ONE NUMBER FOR EACH:		
	<u>Father</u>	<u>Mother</u>	<u>Spouse</u>
Clerical or sales (bookkeeper, typist, real estate salesman, etc.) . . . . .	00	00	00
Skilled craftsman or foreman (baker, electrician, mechanic, factory foreman, etc.) . . . . .	01	01	01
Professional (pharmacist, engineer, artist, etc.) . . . . .	02	02	02
Teacher or other educator (school counselor, principal, etc.) . . . . .	03	03	03
Laborer (longshoreman, gas station attendant, etc.) . . . . .	04	04	04
Service worker (policeman, waiter, barber, etc.) . . . . .	05	05	05
Technician (draftsman, nurse, laboratory technician, etc.) . . . . .	06	06	06
Semiskilled worker (truck driver, factory machine operator, meat cutter, etc.) . . . . .	07	07	07
Proprietor, manager, official, executive (farm manager, contractor, company officer, etc.) . . . . .	08	08	08
Homemaker . . . . .	—	11	11
Student . . . . .	—	—	12
Other (Please specify): _____	09	09	09
Don't know . . . . .	10	10	—
Not married . . . . .	—	—	14

If your mother was the *main or only* wage-earner, please check here. ☐

50. Your age:

17 and younger . . . . .	0	30-34 . . . . .	4
18-19 . . . . .	2	35-39 . . . . .	5
20-24 . . . . .	2	40 and over . . . . .	6
25-29 . . . . .	3		

51. Are you a member of any of these ethnic groups?

Yes, American Indian . . . . .	0	Yes, Cuban . . . . .	3
Yes, Negro . . . . .	1	Yes, Mexican . . . . .	4
Yes, Oriental . . . . .	2	Yes, Puerto Rican . . . . .	5
No . . . . .			6

52. Your sex:

Male . . . . . 0 Female . . . . . 1

IF YOU ARE MARRIED AND YOUR SPOUSE IS CURRENTLY EMPLOYED, PLEASE COMPLETE QUESTIONS 53 AND 54. OTHERWISE, PROCEED TO QUESTION 55.

53. Approximately how many hours does your spouse work in an average week?

\_\_\_\_\_ Hours

54. What are your spouse's average hourly earnings (before deductions)?

\$ \_\_\_\_\_ Dollars per hour.

▷ 55. What is your best estimate of your own family income last year (1968)? CONSIDER ANNUAL INCOME FROM ALL SOURCES BEFORE TAXES. INCLUDE YOUR OWN EARNINGS AND THOSE OF YOUR SPOUSE. CIRCLE ONLY ONE ANSWER.

Less than \$1,000 . . . . .	00	\$7,000-\$9,999 . . . . .	06
\$1,000-\$1,999 . . . . .	01	\$10,000-\$14,999 . . . . .	07
\$2,000-\$2,999 . . . . .	02	\$15,000-\$19,999 . . . . .	08
\$3,000-\$3,999 . . . . .	03	\$20,000-\$24,999 . . . . .	09
\$4,000-\$4,999 . . . . .	04	\$25,000 or more . . . . .	10
\$5,000-\$6,999 . . . . .	05		

### ■ ABOUT YOUR HIGH SCHOOL YEARS ■

56. What type of course or program did you take in high school?

College preparatory . . . . .	0
General (noncollege preparatory) . . . . .	1
Business or commercial . . . . .	2
Vocational or technical . . . . .	3
Other (Please specify): _____	4

57. How much high school education did you complete?

One year . . . . .	0
Two years . . . . .	1
Three years . . . . .	2
Four years — Did not graduate . . . . .	3
Four years — Graduated . . . . .	4
Other (Please specify): _____	5

58. In what year did you graduate or leave high school?

19 \_\_\_\_\_

59. What was your average grade in high school? If you do not have a record of your actual average grade, give your best estimate.

A or A+ (93+) . . . . .	0	B- (80-82) . . . . .	4
A- (90-92) . . . . .	1	C+ (77-79) . . . . .	5
B+ (87-89) . . . . .	2	C (70-76) . . . . .	6
B (83-86) . . . . .	3	D (65-69) . . . . .	7

60. Indicate how much high school course work you took in each subject listed below (9th through 12th grades). CIRCLE THE APPROPRIATE NUMBER OF YEARS FOR EACH SUBJECT.

Subject	Number of Years									
Agriculture . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Business education (typing, shorthand, bookkeeping, distributive education) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
English (drama, literature, speech, journalism) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Foreign languages . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Home economics . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Industrial arts (general shop, woodworking, metal-working, <i>not job-training courses</i> ) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Mathematics (algebra, geometry, trigonometry) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Science (biology, chemistry, general science, physics) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Social science (history, civics, economics) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+
Trade and industry (auto mechanics, foundry, etc.) . . . . .	0	½	1	1½	2	2½	3	3½	4	4+



61. How do you feel about the education you received at the high school you attended. CIRCLE ONE NUMBER FOR EACH STATEMENT TO DESCRIBE HOW YOU FEEL ABOUT YOUR EDUCATION AT THE HIGH SCHOOL YOU ATTENDED.

	<u>Agree Strongly</u>	<u>Agree Somewhat</u>	<u>Do Not Agree</u>
Gave me ideas about the type of work I wanted to do . . . . .	2	1	0
Should have placed more emphasis on vocational and technical programs . . . . .	2	1	0
Should have placed more emphasis on basic academic subjects (math, science, English, etc.) . . . . .	2	1	0
Did not offer enough practical work experience . . . . .	2	1	0
Provided me with counseling which enabled me to continue my education . . . . .	2	1	0
Provided me with counseling which enabled me to find employment . . . . .	2	1	0

62. In what type of community did you live during your last year in high school?

In the open country or in a farming community . . . . .	0
In a small town with fewer than 10,000 people that was not a suburb of a larger place . . . . .	1
In a medium size city (10,000 to 100,000 people) . . . . .	2
In a suburb of a medium size city. . . . .	3
In a large city (100,000 to 500,000 people). . . . .	4
In a suburb of a large city . . . . .	5
In a very large city (over 500,000 people) . . . . .	6
In a suburb of a very large city . . . . .	7

63. What is your best estimate of your family's total income while you were in your LAST YEAR OF HIGH SCHOOL? Consider annual income from all sources BEFORE taxes.

Less than \$3,000 . . . . .	0	\$10,000-\$14,999 . . . . .	4
\$3,000-\$4,999 . . . . .	1	\$15,000-\$19,999 . . . . .	5
\$5,000-\$6,999 . . . . .	2	\$20,000-\$24,999 . . . . .	6
\$7,000-\$9,999 . . . . .	3	\$25,000 and over . . . . .	7

64. Please record below information about other educational programs you may have attended between leaving high school and enrolling in the school from which you received a degree or certificate in June 1967. Be sure to INCLUDE ALL such schools or programs you attended.

If during that time you attended no school or program other than the school from which you graduated in June 1967, please check here ☐.

Type of Institution (For example, 4-year college, 2-year college, special Army, Navy, Air Force Program.)	Dates Attended (For example, 1966-1967)	Degree Received (For example, none)	Reason for Leaving (For example, Could not afford to stay.)

Thank you for completing the questionnaire. We would be glad to have any comments you might like to add.

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